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## America's Crime Problem; Our Individual Responsibility\*

STEPHEN S. TUTHILL,

PAST PRESIDENT OF THE KINGS COUNTY JURORS' ASSOCIATION,  
Brooklyn, N. Y.

"Extreme remedies are very appropriate for extreme diseases" is an aphorism attributed to the Father of Medicine. That you may not come to the conclusion that a conservative business man has suddenly turned radical, I ask that you keep this aphorism clearly in mind during my discourse.

One of the heartening signs of the times is that members of conservative organizations like the Society of Medical Jurisprudence are awakening to the fact that they must take a more active part in the solution of our civic problems if American ideals, traditions and institutions are to be maintained and perpetuated.

The serious problems confronting this country today demand the earnest attention and the militant assistance of every liberty loving American.

We must not forget that other civilizations have passed, and that this one, too, will pass if it continues to signify merely the multiplication of artificial wants and of the means and refinements of physical enjoyment.

The several sub-divisions of the subject assigned to me, "America's Crime Problem; Our Individual Responsibility," really merit separate papers, but in the time allotted it will be my endeavor to cover the main factors involved, briefly and practically.

Our present crime problem, like all of our other civic problems, is due solely to the indifference of our people to their duties and obligations as citizens. They are altogether too mindful of their rights and privileges, forgetting that the maintenance of these rights and privileges absolutely depends upon the degree of fidelity with which they serve their country in time of peace as well as in time of war.

Too many of us have forgotten that "eternal vigilance is the price of liberty." Too many of us are turning

the right to "life, liberty and the pursuit of happiness" into "life, liberty and the pursuit of pelf and pleasure."

The general ignoring of our duties and obligations as citizens reminds me of the story of the poor Southern farmer who visited the county seat on market day and bought a mule. Starting home with his new purchase, he soon discovered that the animal was blind. When he took the mule back to its late owner, who was a student of Freud as well as a clever trader, the farmer was told that the mule was not blind, but that it simply had a "Don't-give-a-damn complex." As you know, a mule has no pride of ancestry nor hope of posterity.

In a Republic like our own, where universal suffrage prevails, it is a national menace, as well as a national disgrace, that not more than one-half of our electorate goes to the polls at a National election, and that only a small percentage of that half expresses any preference at the primaries at which party selections are made.

In passing, universal suffrage has contributed no more to a better America than has prohibition, and the pacifistic efforts of our suffrage organizations are doing more to castrate America than any other agency.

Crime, it is estimated, is costing America ten billion dollars a year, or more than three times what it takes to run the United States Government.

In this national crisis, let us forget about the rest of the world, and until it is mastered, let us give our undivided attention to putting our own house in order.

More and more, I am glad to say, our sincere and thoughtful citizens are seeking remedies for this national disgrace, as is evidenced by the publicity which America's crime problem is receiving today. In some States—for example, Iowa—vigilante committees, under sheriffs, have already done excellent work.

Recently a National Crime Commission was organized under the leadership of Judge Gary, to study America's crime problem and to suggest remedies.

\* Read at the Society of Medical Jurisprudence, New York, Oct. 12, 1925.

Following a thorough investigation, the American Bar Association is actively at work upon a criminal code, which, when completed, will be recommended for passage by our state legislatures.

Our local bar associations have also shown an interest in the matter, but not to the extent that the seriousness of the situation demands.

That fearless crusader for God and right, Frederick Boyd Stevenson, has been thundering for some time past on crime prevention in the columns of *The Brooklyn Eagle*. Through his efforts a number of Brooklyn citizens are now contributing to an advertising campaign in that paper, with a view of awakening Brooklynites to the civic dangers which confront them because of their failure to perform their God-given duties as American citizens. Mr. Stevenson is endeavoring to make this movement not only Borough-wide, but also City, State and Nation-wide, through the media of the press and the pulpit.

A Committee of Twenty-five of the Grand Jurors Associations of Bronx, Kings, Queens, New York and Richmond Counties, at a meeting held last month at the Chamber of Commerce of the State of New York, voted to work for the abolishment of our parole boards, and for the improvement of the jury system in this State, and the five County Associations represented in this committee are committed to a militant support of this work.

A joint legislative committee on the Co-ordination of the Civil and Criminal Practice Acts is now seeking information to be presented at the next session of our own legislature, with a view of amending our statutes to meet what has become a very alarming situation. Before this committee have appeared many of our leading jurists and public prosecutors, and what I shall say to you on this subject will be, in a measure, a reflection of their expert opinions.

Crime is not a new phenomenon; it has always been with us and it will always be with us.

This is not Utopia, but the homeland of a very practical people. They are slow to arouse, but when aroused, are invincible.

Let me quote from an opinion of the Special Committee on Law Enforcement of the American Bar Association:—

"The criminal situation in the United States, so far as crimes of violence are concerned, is worse than in any other civilized country."

So far as I, personally, have been able to ascertain, there has been since 1890 a breakdown in our homes, in our schools and in our churches, and, besides, a marked tendency has manifested itself in this country to protect the criminal instead of society.

Confirming these statements, Judge Alfred J. Talley, of the New York Court of General Sessions, says:

"The country is suffering from an indictment which proclaims it to be the most lawless country on earth."

Judge Marcus Kavanaugh, of Chicago, says there are 135,000 murderers at liberty in the United States.

There were 10,000 murderers committed in the United States last year.

One of the citizens' advertisements in *The Brooklyn Daily Eagle* tells us there are 160 murders in New York to only 10 in London; it also tells us that, out of every 10 murderers in London, seven are hanged, and that out of every 160 in New York City only one is executed. The situation is worse, I am told, in other cities; for example, Chicago, St. Louis and Memphis.

Crime is decreasing in England and increasing in the United States. Why? Because in England laws are made to be enforced, and they are enforced.

Eighty per cent of the criminals in New York City are of the second generation of aliens.

In the first 100 days of 1925 Chicago had a murder a day. It also has a "sob sister" mayor, who is now worried that the police will be too rough in apprehending the law-breakers.

An authority of sporting proclivities has made up the following handbook on the chances of a murderer in this country:—Three to one he will never be arrested. Twelve to one he will never be convicted, and more than one hundred to one he will never die for the crime.

Daniel Webster said that every unpunished murderer takes away something from the security of every man's life.

That crime is alarmingly on the increase in this country is shown by a report recently issued by the Department of Research and Education of the Federal Council of the Churches of Christ in America. That report warrants your earnest perusal and thought.

There is considerable discussion at the present time regarding the so-called Sullivan Law. A marked difference of opinion exists between Chief City Magistrate McAdoo and Judges Mulqueen and Mancuso, of the Court of General Sessions, on this point. It is, indeed, a difficult question, and one that has an important bearing upon crime prevention. The man in the street, however, says, "Either make it impossible for the crook to get a gun, or give us the right to carry one." This matter is now before our Federal Legislature, and we are hopeful that a satisfactory solution will soon be reached in this important phase of our crime problem.

Our States, it has been found, have an exceedingly loose system of local crime statistics.

One of the first steps to be taken in dealing with America's crime problem is a census of this kind.

Even in our own city each of the seventeen separate interested agencies keeps its own crime records with a very loose relation to one another. This has led to a movement by the Grand Jurors' Committee of Twenty-five to establish a Central Bureau of Criminal Records and Statistics in this city.

We should not only have a centralized bureau of criminal records and statistics in each City and State, but a central bureau of all the States in Washington.

In such a bureau could also be kept the finger prints of all persons who have been convicted in the United States, thus making it possible for the prosecuting officers of the States to submit copies of finger prints to Washington for the purpose of checking up the past records of the newly apprehended criminal.

Literally, thousands of Federal statutes, hundreds of thousands of State laws and millions of ordinances exist in this country today, so that it is impossible for anybody to know whether he is legally right or wrong.

But, gentlemen, we still have the Ten Commandments, despite frequent efforts to revise them, and the Federal Constitution, not yet so mutilated that we are unable to identify its principal features.

Within a decade the age of the criminal has decreased ten years.

It is said that 80 per cent of the crimes of the present day are committed by young men under 28 years of age.

Seventy-five per cent of the prisoners arraigned in Kings County are between the ages of 16 and 19.

Three billion dollars are defaulted annually by young men under the age of 25, and this is increasing at the rate of 10 per cent yearly.

New Haven is taking drastic steps to curb juvenile delinquency. The other day eleven boys were arrested there within 48 hours for robbery.



Here is something to think about: At Hartford, recently, a movie audience cheered to the echo a picture of Chapman, the bandit and murderer now under death sentence in that State, and hissed the pictures of the Judge and the Jury who had done only their sworn duty.

Let us examine some of the contributing causes in America's crime problem and see whether or not we have an individual responsibility in the matter.

(1) Lack of parental authority:

The first thing we should do is to re-establish the American home, wherein the father and the mother are the high priest and the high priestess. Discipline, respect and courtesy are conspicuous by their absence in too many homes in this land today.

We must inculcate in the minds of our youth that thrift, industry and self-denial are still the foundation stones of the only worth-while success.

I recently lunched with several prominent railroad officials. One of them, a vice-president, asked me what I would do with a 16-year-old boy if he kept pestering me for an automobile. I answered his question by asking him what his father would have done to him under like circumstances. He admitted it. That is the measure of too many parents of the present day.

I believe that the automobile is doing more harm to the youth of this country than the pocket flask can ever do. We must bring up our boys like *he* men, and our girls in the pattern of our mothers, if the future of America is to be what its founders intended it to be.

I can understand the backsliding of the fundamentalist on first seeing a group of hatless, sheik-haired, balloon-trousered boys, for he had therefore believed that God had made man in His own image.

Th present day dress of many of our women folk is highly suggestive of the Southern Colonel's description of a barbed wire fence—"It serves as a protection, suh, but in no wise obstructs the view."

Every day, on every side, we see the breaking down of the moral fiber—young people casting aside the moral restraints practiced a generation ago, and the thought often comes that good manners, as well as good morals, have been cast into the discard.

Has not the time come to replace the modern home motto, "Let's go," with the old-fashioned motto, "God Bless our Home"?

Parental authority, gentlemen, can be restored, and respect for parents revived, if the parents will realize that they are creators, not pals, and that as such they owe a sacred duty to society in the rearing of their offspring.

The tendency of the parent is to entrust too much of the education of the youth to our schools. I am one of those who believe, however, that morals, as well as psychology, should be taught in our schools, without, however, introducing the question of sectarianism. Also, that we must fashion our educational system better to hitch our boys and girls onto life as it is. A system of education that does not teach the boy and girl how to live, as well as how to make a living, is not an American system of education.

The *Review of Reviews* recently conducted a Current History test among 1750 students in 27 high schools, colleges and universities. The average of correct answers was 43 per cent. Thirteen per cent of them could not name the Governor of their State, and 11 per cent of them failed to identify the portrait of President Coolidge.

I have not time further to shock you, gentlemen, with the assinine answers made to some of those questions, but I will take the time to tell you that the hour is here when the American father should get onto the job of

seeing that his children are properly trained in the public schools, as well as in the home.

(2) The lack of respect for religion:

Our churches are asleep at the switch.

Let the churches of this country unite to combat this rising tide of crime.

To prevent crime, our churches must reach the children, and in reaching the children they will reach the home.

Recently the Men's Club of The Ocean Avenue Congregational Church, Brooklyn, had as a speaker a man with a criminal record of over nineteen years, who held that imprisonment is no solution of the crime problem. The only true thing he said was, "Reach the kid and you will reach the man in him."

Mr. Justice Cropsey complains that in the Borough of Brooklyn there are Scout Masters available for only 30,000 boys out of 230,000 eligible for Scout membership—and that in the City of Churches.

County Judge Haskell, like Mr. Stevenson, also of Brooklyn, maintains that the church can be of great assistance in this matter, as it is an undisputed fact that young men and young women who have had thorough religious training seldom come into the Criminal Courts. In my opinion, Sunday School training is absolutely necessary for every boy and girl within reach of such an institution.

By the way, what are the men and women with church affiliations doing today to stem the fast growing flood of pornographic literature, and to suppress our indecent plays and moving pictures, and also the notorious female beach and street dress indecencies, based either consciously or unconsciously upon the rawest of sex appeals? Gentlemen, we have too many casual church members, have we not?

Let the newspapers and magazines of this country also unite to combat this rising tide of crime, instead of capitalizing it, as they are doing.

(3) Lack of respect for law:

There are, as I have said, altogether too many laws, and an alarming tendency on the part of our citizenry to choose the laws they will obey.

It is an axiom that a child not reared to obey the law of the home is very likely not to obey the law of the land when he becomes amenable to that law.

(4) Lack of law enforcement:

If a law is not to be enforced, it should not be placed upon the statute books, or, if there, it should be repealed. As it is, we find a marked tendency on the part of our officials to enforce laws according to popularity rather than under their solemn oaths to enforce all laws.

Parenthetically let me say that we have a well-officered, but disgracefully under-manned police force. I am glad to say that a number of organizations are now insisting that at least two thousand more men be added to the force. One of the factors in crime prevention is a properly policed city—and eleven thousand men are insufficient to police a cosmopolitan city of six million people.

(5) The lack of respect for the Courts and Juries:

The American jury system is the back-bone of the law. Do you realize, gentlemen, that jury service is the greatest service which a citizen can render his country in time of peace?

But our jury system is sadly in need of stiffening.

In some of our courts, race, creed, color or politics govern the decision of the jury.

County Judge Taylor, of Kings, has said he believes that two out of three acquitted in his court are guilty. How can we remedy this deplorable situation?

First: By only excusing talesmen from service in open court for good and sufficient reasons.

Second: By reducing the number of exemptions. Let me briefly enumerate these exemptions from jury service in this State:

Clergymen  
Physicians or Surgeons  
Surgeon-dentists  
Pharmacists  
Attorneys or Counsellors-at-law  
School teachers  
Editors  
Editorial writers  
Reporters  
Holders of office under the United States, the State, the City or the County  
Consuls of foreign nations  
Captains, Engineers or other officers of vessels  
Licensed pilots  
Superintendents, conductors or engineers employed by a railroad company other than a street railroad company  
Telegraph operators  
Honorably discharged firemen  
Active and honorably discharged National Guardsmen and active members of the Old Guard  
Stationery engineers  
Election inspectors  
Poll clerks  
Ballot clerks  
Veterinary surgeons  
Optometrists  
Embalmers.

I challenge you to give me one valid reason why any one of these persons should be exempted except lawyers, paid firemen and paid policemen? With these exceptions, gentlemen, every other exemption should be wiped from the statute books of this State in order to give us the quality of jury service that the time demands.

From the statute books should be also taken what is known as the Special Jury Act,—that un-American institution which is the haven of the elite jury slacker.

We need more judges who will not pander to law breakers. We have too many judges who act as though they had been elected by the criminals themselves instead of by our law-abiding citizens. We have too many judges who temper mercy with justice, instead of justice with mercy.

We have a judge in Brooklyn who suspended sentence last December upon a burglar who had eaten nine Christmas dinners in Sing Sing. In addition, this judge invited the man to take Christmas dinner with him and also offered to get him a job. After he had escaped punishment, he failed to avail himself of the invitation or of the offer.

Some of you will recall the recent inadequate sentences of one of our Federal Judges. In one case a man was guilty of a mail fraud swindle amounting to \$400,000. He was fined \$500 and sentenced to five days in jail. Another man got away with \$500,000 in a mail stock swindle. He agreed to pay back \$100,000 and went to jail for thirty days—a service at the rate of \$13,333 per day.

We have too many prison wardens who should be conducting Bowery Missions instead of acting as custodians of convicted criminals.

Judge Talley has well said that the criminal has no fear of the law, for two reasons:

First, he knows the average jurymen is reluctant to convict on the evidence submitted;

Second, he has a better time in Sing Sing than out of Sing Sing.

Supporting this latter statement, the Judge quoted from a pamphlet of the Prisoners' Mutual Welfare League, showing that movie and theatrical productions, before they reach Broadway, are given to the prisoners; that they have an \$8,000 theatre; that they enjoy professional baseball playing on Saturdays and Sundays—and that they work 3½ hours a day, according to the report of the State Prison Commission. In addition to this, Sing Sing prisoners, between January and June, 1924, spent \$56,000 for food purchased outside the prison fare.

The Judge also said that the demand of the hour in America, above all countries, is for jurors with consciences, judges with courage, and prisons which are neither country clubs, health resorts, nor miniature colleges.

Further, that the principal cause of crime is the pampering of the prisoner by sentimental reformers, who fail to realize that at least two-thirds of the inmates of such prisons as Sing Sing are men who have adopted crime as a profession, and who have served at least one term. We must put an end to the sickly and nauseating sentimentality shown to the criminal. There are too many flowers laid upon the brow of the criminal, and too few upon the bier of the victim.

Let us have more organizations for the protection of the honest citizen and fewer societies for the protection of the criminal.

And now we come to the question of parole.

Our criminal code has been tampered with to such an extent, especially in the matter of parole, that it is so protective of criminals that it is a major factor in crime production. A layman's answer is, fewer lawyers in our legislative bodies.

Under the State parole law the prisoner is entitled, first, to commutation for good conduct, and, second, to compensation for efficient and willing performance of duties assigned. Only one example:—A five to ten year sentence resolves itself into three years and eight months.

The *Herald-Tribune*, early in the year, quoted Judge Banton, the District Attorney of New York County, as follows:—

"I believe that the sentencing judge is the man who should have the last word when it comes to liberating a criminal. It is bewildering to sentence a man for a term of years and later to find the man again up for sentence after serving a third or a half of the term originally imposed. With all the technicalities now in existence in laws providing for penalties, a judge scarcely knows just how long a criminal is going to be behind the bars." It added:—

"Mr. Banton pointed out that the so-called 'life-imprisonment' really gives the habitual criminal a parole in almost the same terms as a first offender. Throughout the Penal Law, he said, the same exceptions modified sentences which appeared to be heavy."

Gentlemen, it is apparently easier to get a man out of jail than to get him into jail in this State.

The City Parole Board is as great a menace to Society as is the State Parole Board. Such laws should be wiped from our statute books, as well as those providing for indeterminate sentences. Let the judge sentence the man to what he considers an adequate definite term, and then let the man serve that term.

Probation should be confined to first offenders in minor crimes, and carefully supervised.

Let us put the fear of God into the criminal before we

(Continued on page 150)





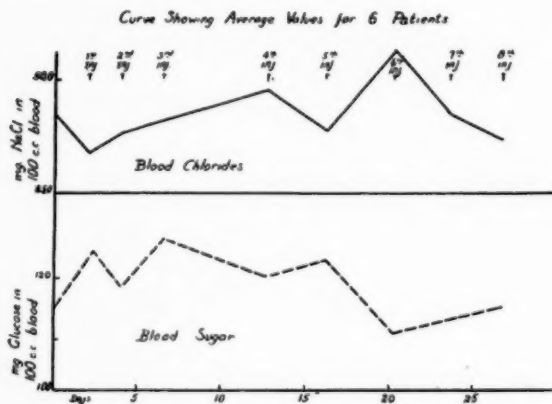
of eczema of all types and of all degrees of severity and have applied the sugar method of Hastings and MacLean<sup>1</sup> previously reported in the Proceedings, and the chloride method of Whitehorn.<sup>2</sup> The clinical histories have been gone into carefully and in all instances, the patients have been placed on a diet free of chlorides and

ment of eczema by means of intravenous injections of sodium thiosulfate, given every 48 hours, the following charts will show a composite result of our studies. Chart I shows the sugar ingestion tests based upon more than 4000 analyses. These results are closely parallel to those obtained by us in our investigations.

It is our belief that the sugars and chlorides have been removed from the blood stream and are deposited in the cutaneous layers and the only means of adequately treating these conditions is to cause the return of these substances to the blood stream. For this purpose frequent analyses are made in order to prevent exacerbations.

Two typical cases are given and the curve showing average values for six patients with very marked disturbances is included.

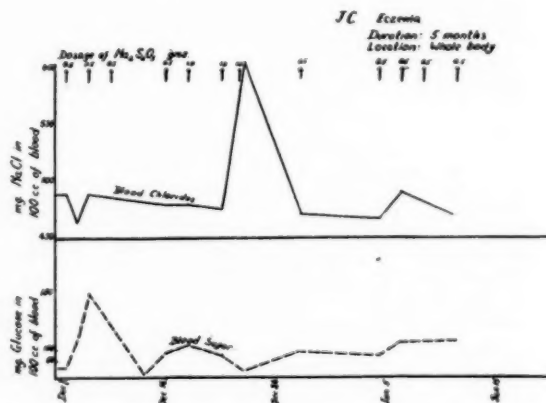
To summarize it should be stated that eczema is undoubtedly closely associated with the physiology of edema and that edema and pruritus are brought about through the deposition of sugars and chlorides in the cutaneous layers, the sugar being responsible for the pruritus and the chlorides for the edema. At the present time information is lacking as to the etiological factor or factors



low in carbohydrates. These patients have in all instances failed to respond to other types of treatment such as have been suggested for eczema and, in the present group of cases the systematic study of the rate of change of the chloride and sugars in the blood has been carried out.

In those cases of eczema which have no other contributing factors, it has been found that, generally speaking, the chloride value is very low and the sugar content very high. These two statements have a very direct clinical application. These two elements play an important part in the pruritus or itching that accompanies these cases as well as the edema. In consideration of about 3000 analyses it is believed that the itching sensation that accompanies these eczema cases is undoubtedly closely associated with the deposition of carbohydrate in the cells of the cutaneous layers. The edematous condition is associated with the chlorides and it has been found that, as soon as the balance between chloride and sugar can be established, the itching and the edema very markedly subside.

For the purpose of illustrating in a preliminary way, the findings that have been obtained through the treat-



that produce the original stimuli necessary for producing the cell dysfunction which is noted in this type of case.

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#### Newer Procedures and Methods in Plastic Surgery of the Face and Neck

Certain advances have been made and newer procedures instituted in plastic surgery during the last few years, largely because more surgeons have become particularly interested in it, says Gordon B. New.

The Saddle-back nasal deformity is probably the most common deformity seen in this region. This condition used to be treated under ether anesthesia. A piece of cartilage was removed from the seventh or eighth rib and inserted through an incision across the bridge of the nose to correct the depression. This was considered a safer route for insertion than any of the others. With ether anesthesia, the mucus and discharge from the nose prevented satisfactory work from below. Now, under regional and local anesthesia, the full thickness of the rib is removed and then after being shaped on a special table with raised sides to prevent any mishap it is inserted to elevate the deformity through a small incision below the tip of the nose. The nasal part of the operation is also done under local anesthesia. The whole procedure is much more satisfactory, both from the standpoint of the patient and the operator, than with general anesthesia. The cosmetic result is much better, the scar being hardly visible at this point.—(*So. Med. Jour.*, Feb., 1926.)

#### Intradermal Treatment with Aolan in Gonorrhea of the Female

Meckel used the intradermal therapy in 63 cases of acute and chronic gonorrhea of the cervix and urethra and gonorrheal complications, employing aolan. After careful sterilization of the skin of the forearm with alcohol or benzine, a fold of the skin is lightly taken up and a very fine needle thrust in parallel to the surface in such a way that its point remains within the epidermal layer and does not go through to the subcutaneous tissue. In 22 patients gonococci disappeared after one single intradermal injection. In 16 patients 4 to 6 injections were necessary, but in those gonococci reappeared, provoked by menstruation.

The best results were observed in cases of chronic infection of the cervix. These patients were cured completely, with the exception of two, after eight treatments. Smears were negative when examined later. Cases which could not be influenced by any other specific or nonspecific therapy were cured by the intradermal administration of aolan. In cases of infection of the urethra, aolan therapy is much less successful than it is in gonorrhea of the cervix. The main factor for success in these cases is the influence conveyed by the skin, therefore, the technic of intradermal injections should be carried out with exacting care.—(*Derm. Woch. No. 1*, 1926.)



# Self Readaptive Movements or Eumorphics - I

Plain Directions for Restorative Body Movements Designed to Overcome Hindering Conditions Caused by Disuse, Disorder, Disease, Partial Paralysis, Injury or Post-Operative Disabilities.

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**Foreword:** In this series of essays the author submits the mature experiences of a long life devoted to the reestablishment of health; of convalescent economies. The topic set forth in this communication, is the *raison d'être* and also the *technique* of carefully guided and graded voluntary movements for restoring balanced function and harmonies in the organism as a whole. Other phases of the subject will be taken up later.

Only those grouped movements are here recommended which are primitive and natural or instinctive. They are such as were performed by every one in childhood and youth, and by wiser ones carried well into adulthood. In later life the majority of them were thereafter neglected—in varying degrees. Some have been omitted.

Whether performances of movement are necessary for one in good health, living an active life, is not here considered. That they are extremely useful in removing varied obstructions to the reflex circuits, the circulation, the respiration (also tissue respiration or oxidation); and thence to the vegetative and other functions, cannot be denied. The voluntary, also the static and kinetic muscles are "the master tissues." They dominate life processes. When normal they always have their steam up." The involuntary muscles "carry on."

The main argument in favor of the present contentions is that a large part of structural and functional retardation is mechanical interference with instrumentalities, hence assuredly they deserve to be set in order and suppressed energy released for work elsewhere. In proportion as voluntary movement is obstructed or omitted, so does one work of the vegetative processes fail of promptness or completeness.

The substance of these papers is memoranda how to perform certain movements normal to man. They are designed and so grouped as to set free adhesions, kinks, angulations, cross-compressions, to reawaken long impaired or lost motor habit paths and thus to replace structures under control of volition or automatism. This is achieved whatsoever be the causes of the hindering conditions which exist, so long as the parts are moveable.

## What is eumorphics?

The word is a good, but as yet unfamiliar, one descriptive of the whole enterprise of raising the coefficient of efficiency in the animal body as a motor mechanism, as an engine or motor for the generation, transformation, and adaptation of power. "The Human Power Plant" as Casper L. Redfield calls the body.

Eumorphics includes movements done upon (induced or akenetic) as well as by those done by (kinetics) for the purpose of improving shape, power and adaptability.

This enterprise is just as much a consistent field of body-and-mind welfare endeavor as is eugenics or eutheics. Indeed it is one leg of the tripod of which they are the other two. Of what use is man—in his role of muscular animal—unless his muscle engines are kept in suitable action to do new part?

The phase of eumorphics here presented is the enterprise of restoring harmonious interplay to those parts equipped by voluntary, and semi-voluntary muscles, and

their direct and indirect (involuntary) correlates. The main purpose is to fulfill motor obligations in the process of health reestablishment; in organic consistencies and completeness.

**Argument:** Most humans, perhaps all adults, have acquired some hindering postures and attitudes or lamenesses deserving correction. Some corrections are urgently needful. They are especially valuable as age moves on; as deteriorative conditions accumulate and grow worse. In particular are they valuable after diseases where partial paralysis or traumatic shocks, or slight injuries, have been produced. Often are shown minor deformations and mechanical interferences among vital mechanisms affecting vegetative functioning, especially of the respiratory, cardio-vascular, digestive, genito-urinary, or of any thoracic, abdominal or pelvic organs.

The mechanisms of voluntary movement are duplex. Those of one side must be, as nearly as possible, in the same condition, tone and vigor as the other. In order that these endowments shall be maintained in their integrity, their tone and power should be kept about equal. The muscle masses are engines, of the vertical expansion type. Their role includes tissue respiration. This is paramount; must be kept in a good condition or all other functions suffer.

The commonest, almost universal hindrances arise as normal old age changes begin. When maturity is reached we must expect more or less such deteriorations; they also follow prolonged disuse or abuse. As age changes progress they are shown in stiffnesses, rigidities, not only in the joints, arthroses, amphiarthroses and tendon sheaths, but also through the replacement of muscle cells by connective tissue cells. Hence the urgent need is for a stretching of the pliant and elastic structures and for movements of the junctures in accord with their design.

The corrective movements whether induced—done upon them by another—or willed (voluntary) should be a little beyond what they are accustomed to, or built for, or are done in their customary performances. This extra movement is in order to make sufficient impression upon them and to get the full length of the parts restored (e.g., backbone cartilages, ligaments and attachments). They should be put upon the stretch once in so often, otherwise a host of disabilities, distresses and decrepitudes arise and grow worse.

The memoranda herein offered are designed also to help a client or patient in carrying out movements at home. They are performances of voluntary movements of a simple or primitive sort, similar to those any child or young person does frequently and instinctively while at play, and in following self training impulses, but which became gradually abandoned in adulthood. Hence the body has suffered the effects of stagnation from disuse.

By the frequent, or even occasional performance of willed and graded movements can the structures of any one be so improved in shape, conformation and pliancy,

the muscle tone (including the voluntary, semi-voluntary and involuntary) so restored, that normal postural tone of the viscera and hence function will return.

The object of the movements is to refit or readapt the structures so that each shall share in their harmonious interplays and reciprocities. And this whether there be a conscious, or only an unconscious, balancing done between forces and instrumentalities.

The first task is to find out where, how and why the parts fail, or are hindered from doing their full work, from "carrying their own weight," or "load," while standing, or sitting, or walking, running or "sparring" (i.e., stepping about, sidewise or turning around.) by causing these to be performed forcefully and in ways natural to the structures. The part is thereby freed from hindrances and obstructions. Also the subject should learn how to make just enough effort (or force) and never at any time too much. Thus one's energy supply is saved. The habit can be learned or acquired of making this saving, or renewal, while in any or every aspect of life activities. "Waste not, want not." "Normal muscles"—as said—"always have their steam up, but they 'go bad' unless they perform as designed often enough.

Three major groups of structures cooperate (or reciprocate) in carrying on functions of contained organs. These should be zealously freed from binding or limiting conditions: those of the chest, the trunk and the pelvis.

### Principles and Aims

The chief conditions to be maintained in these training movements are that each shall be done with deliberation, accuracy and graduated force. The object is to regain full conscious control of the parts. They should start from a state of complete ease (or poise) and the power gradually put on till the tension is full. That is from nothing to the utmost; from zero to maximum. They should include all of three basic movements: push (extension), pull (flexion), and turn or twist (rotation). Unlimited combinations can be made as they may be called for in performance of complex actions, and in order to execute grouped movements with proficiency.

### Trying Out Acts, to Learn "How They Feel" (Subjectively) By Doing and Thus Becoming Aware of One's Capabilities and Limitations.

The series here described is chiefly to restore the static muscles, but also the kinetic or the locomotive (the limbs) are involved, and their combinations.

It is well to begin a seance of training by trying out the structures; by doing such simple acts as extending or pushing one's arm from a state of ease, increasingly as far and vigorously as possible. Then do the same in pulling (flexion) and in turning (rotation). Then do the same with the other arm, then with each leg in turn, then with the neck; slowly and increasingly rotate (pivot) and head till the chin is over the shoulder; then bend the back in four ways: right, and left, forward and backward to the limit (or ambit) and hold at the end while counting two.

Then sit in a chair (without arms) facing the back-like riding a horse. Clasp hands on top of the head, grip with the knees (so as to fix the hips and buttocks). Then turn the upper part of the body as far round to the left as possible. Hold that point for two seconds. Then to the right and hold at full tension, two seconds. Note that the only place the backbone can rotate is at the waist line. (It is most important that it shall turn and completely, once in so often, or all the organs innervated from these neuromeres will suffer.)

Next stand, facing and holding onto a firm supporting object, at about the level of the chest. (Such as bed post, a newel post, mantel piece, or top of a chiffonier.) This is to give confidence and prevent falling. Then repeat the neck and body turning as described, more forcefully, to right and then to left, till an object can be seen directly in the rear. Then do the same (rotate) while bending far back. On each back bending turn to the left and bend, then to the right and bend. Then while still holding on to support sink down on the heels and rise—repeat so many (5 or 6) times.

This practically completes the cycle of entirely primitive back movements, especially of the static or skeletal group. Others can be used, but they are mainly modifications or elaborations of these. Also a number of special training movements will be more fully described. Many can be done better while lying down; such as are grouped for special purposes.

Among these grouped movements may be visualized those in the following list. Some of these will be set forth in detail. They can be best learned (by some only to be learned properly) when demonstrated by an expert or by the physician.

A powerful adjuvant to any slowly increasing movement is to expire synchronously, emptying the lungs. This is the main feature of the best single system of development which has come to my attention—that of the late Allen Lester Fowler.

By means of steady expulsions of air from the lungs, they are rid of vitiated deep lying tidal air and possibly of some residual air. This is much better done when accompanied by slow forceful extension or flexion of a limb; or of two limbs alternately, as of the legs. A profound compression is thus exerted on all the viscera. If an excess of omental fat is a feature it seems to melt away; thus the deadly over-large waist line is reduced to a safety point. Respiratory capacity is also thus enhanced.

### Posture and Attitude Improvements

Man is essentially "an adaptative mechanism" and the criterion of efficiency, in the human body is the degree of automatic readjustability possessed and maintained. For every one, especially for mature adults, it is desirable to practice economic movements capable of adapting and distributing the body weight or "load," while sitting, standing, walking, running, turning about, or "sparring" or sudden quick shiftings of the load—backward, forward, or roundward (pivoting), while performing complex movements supported on the feet.

It is well worth the effort to learn and practice superior methods of so strengthening the structures—those concerned in supporting the body as a whole—the static, the bony skeleton, the skeletal muscles, the rigid ligaments, the elastic cartilages, the discs between the bones of the back (shock absorbers), the tendons and other accessory structures, in particular the junctures or hinges, the free and the restricted, or potential joints, such as the arthroses, the amphiarthroses and the synchondroses.

The object is to achieve an improvement in adaptation—which will usually be found needful—in balancing the body as a whole or in some parts out of balance.

This improved adaptation is gravely needed while traversing crowded thoroughfares, especially in the dark, on uneven, or rough, or slippery, or over-soft, or treacherous surfaces, also while crossing over a support, a narrow bridge, or a single log over a chasm or stream.

Of the muscles concerned in posture (adaptations normal to that body, which may be good but too often are bad) or in attitude (special adaptations), faults are due

to unconscious imitation or some compelling causes, local inadequacies such as defects of development, weakness, inherent or acquired through disuse, or misuse, or disease or injury. We may view them as the static (more or less fixed) and the kinetic (the active movers). Of these last there are the locomotor (used in walking) and the bradio-motor (movements of the arms).

The architectural center of the vertebrate body is the backbone or spinal column. To this is attached one way or another, practically all the duplex muscles. Hence the backbone needs to be kept, as nearly as possible, in perfect alignment and capability of full adaptation while at rest or in action.

The spinal column tends to become impaired in its moveability for a number of reasons, the chief of which is disuse, omission of the creature to perform needful movements, symmetrically, in amplitude of range, in accord with its design and function. Thus free and full erectness is interfered with. They are shown by stooping, crouching, hunched up or drooping, sagging, protruding belly, general slackness.

This function of the backbone includes the neck muscles and their attachments to the head which is borne aloft, kept in its normal adaptation, through tone in these muscles. The head contains the most important and complex structures; the brain—the main engine of the organism—likewise the organs of special sense, whereby man achieves information as by the use of sight or hearing, and learns how to negotiate himself.

These organs of special sense as well as all others, are unable to do their perfect work unless gross structures are, and remain in, or regain, their normal pliancy, adaptability and postural tone.

The first thing—or the most important thing—to suffer from faulty postures or attitudes, is that the backbone loses some part of its flexibility, adaptability, alignment and its full measure of length. Each section or part must be capable of working within its appointed range or ambit and be ready, in order to do its part in the sum total of posture or attitude.

Frequently contractures and adhesions arise whereby any one of the thirty-one pairs of spinal nerves—which emerge from the backbone—may suffer more or less compression.

At least enough to interfere with the prompt and complete transmission of nerve impulses and conduction—from and to the cord—and thence to the uttermost parts (the periphery) of the body.

In the memoranda to follow, it will be noted that particular consideration is given to each in this matter of restoring normal posture and attitude. Particular attention is directed to the achieving of normal pliancy of the backbone.

In efforts to achieve poise, a stable equilibrium under all conditions, keep in mind certain rules:

Use deliberation in all corrective or readaptive movements. Use only so much effort as is needed, never quite as much as may *seem* needful; also a careful graduation of effort—energy—from poise to full tension. The real need is the sincere wish to succeed, and also persistence. Start at zero (poise) and gradually increase the tension to the point of full tension, whether to pull, push or turn, counting: one, two, three, four, then hold hard while counting five, six.

#### Posture and Attitude, also Gait; Carrying and Distributing Body Weight or "Load"

*Posture* is the sum of actions—passive or active—in the fitting of body parts together; adapting them in accord with one's inborn or natural peculiarities of shape, size, type or build or conformation. These may be sim-

ilar to others, or be peculiar to themselves, but normal to that individual.

*Attitude* is the sum of alterations in arrangements of parts from the norm which one *assumes* for any reason, such as compensatory adaptations due to local over-tone or under-tone, shown as stiffnesses or flaccidities, brought about by the effects of habit, imitation (fashion, etc.) or of visualized suggestions, or by wrong training, or injuries, or diseased states.

The endeavor to *teach* one to acquire a good poise in sitting, standing, walking, running, turning or moving about, would squander much time and effort. Even then the average person would get only a confused, partial and disproportionate idea of the enterprise.

Experience proves that it is far easier and better to *train* the body; to rouse all the motor intelligence which is ample in each one. Unless one has trained themselves in conscious balancing they need to be trained by another. The best way is to proceed somewhat as follows:

For that one whose structures are practically normal, free from acquired hindrances, or pronounced postural faults, an effective balancing device is to carry on the head some light object. At first use a bundle of soft stuff which can fit itself upon the round contours. Keep this on the head while assuming various attitudes; sitting on a chair, then standing up and while walking about, turning, climbing and descending stairs, lying down and getting up, etc.

When this task is mastered then take an object more difficult to hold on, such as a book, then a ball of some sort, an apple or an orange, and practice movements of poising.

Most of those who consult a physician have acquired a lot of wrong obstinate, posture or attitude habits, due to the left-over effects of neglected right use, or to disease or injury. These show in the form of weaknesses here or rigidities or contractures or spastic states there.

To get rid of such conditions as these something more should be done. The neglected or deformed structures need rousing to overcome their resistance, should be stimulated to make efforts to get by the hindrances, to force them to get where they belong to readapt themselves, and to habitually keep them there. Thus the neck, the backbone, the loins structures are urged to put forth their latent powers and to push the head into the air. A convenient device is a bag of sand of five or ten or later even twenty pounds weight.

Balance this on top of the head and walk about the room, also turn around and back and forth and side to side.

After becoming well accustomed to carry the five pound bag, use the ten or twenty pound one, as the muscles regain power and ease. Then walk up and down stairs.

This carrying of the extra weight on the head will rouse all the latent powers for distributing one's body load, and soon form habits of uplifting till they become automatic. Then try sitting down in a chair, then on the floor, then lying down—shifting the head load—and soon one will acquire powers of falling easily and getting up with equal ease. Do this practice at least once a day for two or three weeks—better two or three months.

Of the many ways to regain an all-round balancing of the body load none surpasses barefoot walking or running. A very highly sensitive area is thus brought in contact with the ground and compels extreme care in stepping, in adapting itself. At once the hitherto careless, automatic adaptations of a foot protected by a shoe receives an entirely new set of motor (sensory) stimulations and it is called upon to readapt itself to new and strange conditions. Thus the reaction times—messages sent to the brain (afferently) and outwardly again (ef-



ferently)—are thrown into now unfamiliar, long disused, but instinctive adaptations, similar to those used by man since he became an upright two-footed (bipedal) animal, that is *homo erectus*.

These instinctive motor habit paths are reawakened when the foot is bare and must be revised along their original lines. Thus foot placements and replacements are forced into old, instinctive channels.

The under surface, so long accustomed to not only protection but prevented from making its normal adaptations by hard, rigid, soles and cramping of the toes; careless habits of movement have been formed, all sorts of faulty attitudes. The feet (pedal extremities) thus become little more than a "peg leg," a more or less deformed one, in most instances. The gait may also have become more or less clumsy, ineffective.

If the surface walked upon barefoot be soft and smooth—as a carpeted floor, or a sandy beach or velvety turf—the foot structures need to make little change in their actions; the automatic movements can prevail. When the surface trod upon is uneven, rough, full of obstructions, stones, irregularities or loose pebbles, then the placements must be, of necessity, much more careful.

Lessons highly instructive are thereby learned in load carrying. At first a different kind of clumsiness prevails. As the contact surface of the foot becomes accustomed to these barefoot reactions, as the muscles, the arches and ankle attachments, become stronger, more normal, then improvements in load carrying will ensue. The old, instinctive, habit paths become recovered, especially the primary powers return. The lower extremities were originally like hands. During the stages of tree life (arboreal) man had four hands—or grasping extremities.

The foot is composed of structures which form—among others—an antero-posterior arch; some say also a transverse arch. The front part of the foot has—even now—grasping powers though little used but useful still when compelled to do this element of grasping, as in the down pressure of all five toes; also in catching hold of the surface while climbing a slope.

This grasping (prehensile) power still persists and is of value to barefoot peoples. As plantigrade—heel and toe—progression became the rule, less need existed for grasping. Even now, however, by retraining some part of this gripping helps much in securing balance and grace, and walking efficiently. The use of sandals, or hard rigid soled shoes, caused this grasping power to fade away. The practice of walking with no foot covering, or only a soft glove-like one, such as a moccasin, tends to restore so much of the grasping power as contributes to perfect balance. Note also it is of great value in curing disorders and distresses of the feet where they have occurred.

#### **Outline of Primitive Movements—Hereinafter to be Described, Found Personally of Practical Value in the Re-Establishment of Functioning, Motor and Vegetative**

Their aims and effects are such as these:—First, to overcome acquired structural hindrances, which exist in all adults, due to developmental defects, to disease, to misuse or abuse, as well as to injury; to release acquired obstructions and limitations of action; to set free adhesions, contractures in parts designed for movement, to set free other parts (visceral organs, spheres, tubes, nerves, etc.) from hindering compressions; to secure space for these organs (viscera) to work with freedom; to strengthen and steady their supporting structures; to aid in restoring functional ease; also to restore functional rhythms, also, in muscle masses so that they may do their part in vegetative, metabolic and other particulars, as well as to serve their special locomotive and other

kinetic functions; also, to thereby make the large contributions which such rhythmical competences do to the harmonious interplay of the body, mind, emotion, business—the organism as a whole.

While it is convenient, indeed necessary, to perform the majority of such movements once in so often, they can best be learned and practiced under some such special grouping as is herein to be indicated. By following this plan it is more feasible to note and measure the particular effects needed in each instance, and to get desired results. The effects of such movements interact so largely, that other desirable effects are, at the same time, secured. We may, therefore, visualize them for convenience somewhat as follows, then take up the technique in the fuller descriptions.

**Posture and Attitude, also Gait Regulation.** Hints for self-guidance in carrying, distributing and balancing the body weight or "load" in all directions and speeds. Also, for securing the normal up-thrust of the back bone to recover the full length from neck to buttocks, to get rid of stooping, crouching, strained attrition.

**Posture** is the sum of movements, chiefly static, but also some kinetic, done in accord with the shape and conformation normal to the individual.

**Attitude** is the sum of self-adaptations of parts, assumed for any reason and due to any causes such as disuse, misuse, abuse, loss of tone or over-tone, disease, injury, or to adhesions, contractures, or to limitations whereby one's adaptations are modified in order to secure economies or compensations, or to follow prevailing fashions.

Removal of hindrances to balanced action, such as constrictions, contractures, adhesions, anomalies of tone, weakness of one group such as is not compensated by associated parts, as where the stronger (or normal) parts exert deforming or spastic pulls on the weaker ones. In this, equipoise is essential. The means include induced movements to replace parts which have become displaced through some fault in the supporting structures, notably of the internal organs in the chest, trunk or pelvis, and to gain improvement in the tone of the supporting structures, the external, also the internal, and the collateral or accessory. This includes movements which compel the backbone—the architectural center of the body—to regain all the mobility possible, in bending and turning (rotation) to overcome the tendency to stoop, to crouch, to remain unduly rigid, awkward, inefficient.

Corrective and developmental movements designed to restore pliancy and free mobility of interplays between the reciprocal mechanisms of the chest, trunk and pelvis by releasing contained organs (heart, lungs, abdominal and pelvic organs, etc.) from the compressions caused by undue fixations, kinks or angulations, by developing both the rearward abdominal muscles (psoas, iliaci, quadratus lumborum) and the forward (parieties) for correcting prostatism and some hernias.

Restraining of the faulty acts and habits shown in sitting, walking or running; of getting about on the feet and legs with greater facility and less effort or fatigue, through the use of better balance, economies of poise, hence to acquire gracefulness, nimbleness, certitude, especially for safety in danger from e. g., traffic obstructions, on slippery surfaces, in the dark, and when otherwise at a disadvantage.

Movements designed to relieve foot troubles and restore competency to, and remove pain from, over-stresses or distresses due to maladaptations of the feet, the arches and the more remote parts—legs, back, neck and scalp, etc. which suffer sympathetically.

Phantom, or shadow, golf, through practice strokes. It is a type of familiar, popular and highly beneficial



open-air pastime; also an incomparable convalescent measure. It consists of practicing strokes with a golf club, much like, but more varied and symmetrical (hence superior to) golf as played on the links; these strokes being made in both directions, thus balancing the duplex muscle groups. This can be done at any time or place: in one's room (windows open), or in one's back yard, and trains all the available power, pliancy and proficiency of the wrists and shoulders; and occupies only ten or fifteen minutes.

The art of conscious self training in relaxation, through balancing the performance of motor structures with simplified and controlled rest, a masterful balanced urge, equipoise, mobile equilibrium. Cultivate the wish to be at ease, to "let go," to abandon the expenditure of useless force, to get rid of cramping, crouching, wasteful attitudes. In particular, the conservation and renewal of energies while in the day's work. This is done by "the ceremonial of relaxation" to gain positions of greatest advantage from which to start in all progress and repair; to escape "wear and tear" structural, cerebral, and emotional.

The practice of walking on a narrow surface, so as to recover balance, poise, like crossing a single log over a stream. Use a section of railroad track, or a curbstone in a park.

Centrifuging the arms for the purpose of driving stagnated blood to the ends of the fingers, in order to enhance healing, heat regulation, local nutrition and repair.

Exercises for Repair of Foot Troubles, Weak Arches, Mortons Painful Foot; Hand Wrestling to Train Self-balancing and Especially Self Confidence; All Four or Quadrupedal Training for the Limbs and Visceral Supports and Valves of the Veins; The Desk Exercise to Mobilize the Prostatic Plexus.

Directions for getting the best results by graduated exposures of the entire unclothed body surface to sun rays, solar radiance, "sky-shine," to the ultra violet, and other (heat, in winter) rays; also to cool air and temperature changes. This is the greatest restorative agency, next to movements, rests, and food regulations.

### Training of Respiratory Organs

First of breathing exercises: these it is well to pursue until they become familiar. When right habits are formed they should persist. The chief influence of respiratory training is to establish a forceful expulsion of air, which includes strong associated contractions of the abdominal and other accessory muscles. It is a particularly economic and effective measure to combine this air expulsion with other movements—as of a limb—and constaneously, i.e., along with the movement, accompany it with forceful expiration. Thus two purposes are well served at the same time.

The bed ridden or chair bound or partly crippled patient is seldom, if ever, called upon to take full breaths; merely shallow inspirations of tidal air. Hence the lungs are seldom, if ever, dilated and thus the basal metabolism sinks lower and lower. Every active cell suffers from deficient oxygenation (anoxemia). Likewise all the mobile muscles of the chest and abdomen—anterior and posterior—are through disuse rarely brought into emphatic action. The play, or competitive element, should be elicited by various devices. E.g. blowing soap bubbles, or on a musical wind instrument.

It often surprises me how these deep respiratory expulsions amplify vaso-motion, distribution of fluids, warm up the chilled and stagnated extremities, hence induce *bien faisance*, a better poise and more effective and refreshing sleep.

One of the best "systems of physical culture" coming within my experience, is that of the late Allen Lester Fowler. This consists of combined, forced expirations with at the same time increased tension (flexion and extension) of a limb or muscle group. Also W. Curtis Adams devised a good combination of leg and abdominal movements. Now the much in evidence, highly advertised method of Walter Camp with his "daily dozen" is based on long stretchings, turnings, and twistings of the body. This I urged many years ago.

Any of these "systems" can be performed, carefully modified, by the weakest, most "sensitive" and fearsome "nervous invalid." They can be pursued while lying down, or sitting down, and as continuously as may be wished.

In particular the bed ridden, or chair bound, or crippled, invalid can, and should be encouraged to bring into play graduated extension of the back and neck, also turning and rotating movements thereby compressing the waist line and diaphragm. So-called heart diseases are no bar to most of these. They will greatly benefit and are now being urged with confidence.

### My Devices for Reeducating the Abdominal and Pelvic Structures Follow

Any compressing movements, preferably alternating ones, exerted upon the abdomen and sides of the ribs—lower chest—aid in restoring tone to peristalsis and relieve constipation so great a curse to all sedentary persons.

*Movements for obstinate constipation*; to reeducate the correlated voluntary muscles, and thus impress the involuntary mechanisms so as to activate fluid propulsion, especially of lymph, blood, also the contents of tubular and hollow viscera and the splanchnic circulation.

Purposes: (1) To stimulate the direct and accessory muscles; also the intestinal and colonic action through regaining conscious control of diaphragm, abdominal muscles, also of the posterior group, the psoas, iliacus and quadratus lumborum; also to improve the positions of viscera by securing uplift of the abdominal contents through improved tone in the supporting structures.

(2) To activate—bio-kinetically—the entire splanchnic circulation, which so readily gets stagnant.

(3) To activate propulsion of contents of tubular and hollow viscera, to restore muscle tone and to overcome abdominal drag or sag.

(4) To improve involuntary muscular fibers in the intestines themselves by self manipulation, auto-massage, through the associated voluntary muscles.

(5) To coordinate respiratory function so as to induce aeration of the blocked circulation (stasis) in the splanchnic area, not so much for the purpose of helping oxygenation as by forced draft, oxygen distribution, thus urging gaseous distribution through the lungs by unloading stagnated lymph and blood from the intestines and collateral structures. These effects are secured by the following of a series of combined primitive movements, much more completely than by means ordinarily employed.

Forms of movements:

Posture: The patient begins by lying down on the back—dorsal decubitus—hands clasped behind the head, knees straight.

Directions: (a) Pull with the clasped hands, the object being to raise the chest, separate the ribs, and lift the diaphragm to a position of advantage to work; also to bring into action the shoulder girdle group and the retractors of the neck and spine, *erectores spinae*.

(b) Inhale fully; then draw up knees while inhaling. The diaphragm is thus raised, ascends to its limit be-

cause the chest and ribs are fixed by the uplift and tension of the shoulders and arms.

(c) By keeping the knees bent the tension of the diaphragm is lessened.

(d) Exhale forcibly while the knees are still raised and are further carried up toward the chest; this brings complete compression upon abdominal contents by the combined action of the down thrust of the diaphragm adding the tension of the abdominal muscles and also the tension of the psoas, quadratus lumborum and the iliacus.

While on the back (in dorsal decubitus) this group, the psoas, iliacus and quadratus lumborum, lie posterior to the abdominal contents. Hence in the act of forceful exhalation a thorough compression, a pumping, is exerted upon the abdominal contents by the combined action of both anterior and posterior groups, reinforced by the action of the diaphragm. This up-drive of the diaphragm invites an upward excursion of the entire abdominal contents. There follows after the knees are extended, the expiration completed, a period of complete relaxation which should be encouraged—no hurried repetition should be made.

This is followed—after the knees are extended—by a period of rest and relaxation. Then the fluids move freely in the relaxed tubes and vessels. They are encouraged to move freely by the act of inhalation before repeating the movement, i.e., forcible exhalation while the knees are lifted up. By this lifting of the knees while exhaling, followed by the quiet inhalation, there is instituted a powerful pumping action. Thus are the splanchnic structures all pumped free of vitiated fluids, new clean fluids are then encouraged to take the place of the surcharged others.

The kinks, angulations, twists and other maladaptations are encouraged to resume their normal relationships.

Helpful additions to the above are the following: Patient lies on the back, legs (knees) drawn up, heels near the buttocks; then lift the hips, resting body on the back of the head and feet, then thrust one arm across the body, and above the head—full extension—turning to that side (across the body) then rest; next thrust the other hand across and upward, resting the body on back of head and feet, arm fully extended.

This may sound complicated but is really simple and easy to perform. It is much easier than the following, but is not so efficacious:

Patient lies on abdomen (an attendant holds down the ankles) he clasps his hands on the back of his head, raises the head—thrown backward—then turns to the right, rests; then turns to the left, rests; repeats, say, ten times.

This grouping of simple, primitive movements can be modified to meet varied needs, and serves to exert forcible compression on one or another organ. It is an interesting, but commonly observed fact, that most patients revolt at performing a variety of movements, no matter how much they promise of relief. In order to sustain interest it is better to teach one, or one group, capable of special adaptation and vary it from day to day, showing how it can serve new or more specialized purposes. Thus interest can be maintained and progress made.

R. Tait McKenzie devised an excellent method of so strengthening the abdominal muscles that hernias, both inguinal and abdominal, are relieved and often cured. This is done while lying on the back, raising the head three inches, thrust both arms forcefully first to right, draw them back and then to left; rest and re-

peat. To this I add expulsion of air along with each movement.

Also the "scissors movement" of W. Curtis Adams, accomplishes the same purpose. This is performed while lying on one side. Raise the legs slightly, keep the knees stiff, and make alternate movements from the hips, forward and back, resembling the action of scissors.

#### Specifications for Motor Reeducation

Revision of motor habits and directions for self re-establishment during convalescence or chronic impairment.

The topic here presented is chiefly that of self performance of certain reconstructive and rebalancing procedures which have served me well and are designed to restore the motor capabilities of youth and early prime.

Oftentimes I am consulted by those who have had the best professional counsel and care during illness or often appraisal for some particular malady. They have reached the stage when it is desirable to resume ordinary activities but to whom inadequate or inexact guidance was given.

Usually the individual is well aware of the need for a careful plan of procedure but lacks judgment and resourcefulness, especially in gradations of reparative doings; what to do, how to do it, how much to do, and what is unwise to do.

Often they have consulted high authorities on diseases of the heart, blood vessels, kidneys, digestion, metabolism, or other lines. From these counsellors they have received right enough but vague, inexact or conventional suggestions—at least as they quote them to me.

It then remains for me to make my contribution; none too easy, unless I am put in possession of important facts and findings. It would have been far better had these specialists cooperated with me—or some one similarly trained—not only for present but future mutualities. However, under the circumstances I hesitate to communicate with them. They too often resent it as an intrusion.

The situation usually stands somewhat thus:

The creature has acquired many relative and some severe, disabilities due to antecedent disease, also to disuse, misuse or abuse of motor equipment. These handicaps deserve—indeed require—appraisal and correction; otherwise important functions are retarded or deviated and remain inefficient.

Sometimes these handicaps are pretty severe; obstructions, disabilities, especially of the junctures as of the chest, or loss of tone and control of the abdominal function, or of the pelvic cycle, the procreative in men and utero-genital cycle in women. Thus the contained organs can work only to disadvantage. Also there are rigidities in parts which can only function well when they become pliant, under self domination, or automatically.

(To be concluded in July issue)

#### Woman Fined for Not Reporting Measles in Home

According to a recent news item appearing in the *White Plains, N. Y., Reporter*, a woman was fined five dollars by City Judge Stephen Holden because she failed to notify the health authorities of a case of measles which existed in her home. She pleaded that she did not know the existing law in regard to communicable diseases but evidently the judge thought that ignorance of the law was no excuse.—(*Health News*)

#### Iodin and Mustard Gas Dermatitis

Dermatitis produced by iodoform poisoning, or other iodin preparations, and that produced by the amino compounds is promptly relieved by the injection of manganese butyrate. This is also helpful in mustard gas poisoning, but is not sufficiently strong in severe cases.—(*Dr. J. E. R. McDonagh, of London, Eng.*)

## Papillary Carcinoma of the Bladder\*

VICTOR COX PEDERSEN, A.M., M.D., F.A.C.S.

New York

Neoplasms of the bladder are at peculiar disadvantages which apply more accurately in this viscus than elsewhere in the urinary system, although of course they are generally present in that system.

First, we have the muscular activity of the bladder which never leaves the growth at rest but twists and compresses it when evacuation occurs and in a similar but lesser degree when the bladder becomes distended. The rectum behind the bladder is definitely another factor in this muscular disturbance, but late rather than early in the history of the case.

Second, contact of the urine with the surface of the tumor is a chemical disturbance which, absent in the normal bladder with normal urine is cumulatively present in the altered mucosa of all new growths from the outset and especially after cystitis provoked by the foreign body involves the whole viscus.

Third, the embryonal theory of the origin of neoplasms has not yet been totally disproved or dismissed. Inasmuch as the urinary and sexual systems occupy the cloaca of the fetus and inasmuch as the organs of both sexes are present during the first few weeks of fetal life, it follows that embryonal residue undeveloped in the sexual and urinary systems are probably more common in the cloaca than anywhere else in the body. To that extent in which these general facts are true new growths of the bladder are proportionately more serious than elsewhere because the factors of disturbance must make them grow rapidly and extend further than for example new growths of the breast.

The influence of manipulation on a cancer of the breast is aptly illustrated by the following experience related to the writer by one of the pathologists of the city. In examining the breast and glands from the axilla it was found that practically all of the glands were spotted with colonies of cancer cells and looked as though they had been peppered with such cells. As this condition was practically present in all the lymphatic glands, the pathologist determined to locate the cause and learned the following details. For about a month prior to the operation the tumor had been examined by upwards of twenty professional men including a section of students. Obviously all this intrusion of doubtful necessity or wisdom upon the cancer scattered its cells everywhere, and in this patient probably invoked early and ultimate failure of the operation by extending the cells through the lymphatic channels into the pleural cavity and lungs as examples.

The rule is a sound one that the decision to remove a tumor anywhere in the body should be made with the least possible delay and investigation. A leading proctologist has stated to the author that he no longer risks the removal of a section of a tumor but determines on operation on the basis of the tumor, first because of the known malignancy of rectal growths arising from the foregoing three factors already discussed, and second because of the risk of opening channels of transmission of cancer cells by the excision of a specimen. This rule will be especially safe for neoplasms of the bladder although, of course, the scientific temptation is great to secure a preliminary pathologic diagnosis. The same

proctologist states that he prefers to wait for the pathological report after the tumor has been removed. On this basis it might be well for the groups of students to accept the description of the tumor by the surgeon so far as palpation is concerned. Personal handling could be disposed of by passing the fresh specimen around the amphitheater with instructions to feel the mass itself and the lymphnodes, taking the cancer of the breast and the contents of the axilla as an example. Probably if not certainly much harm to the patient will be avoided.

That sloughing tissue is a source of bacterial invasion and even without such invasion a source of toxic absorption and intoxication of unknown quality has long been realized. Its importance is exemplified by experiences in the war leading to the modern definition of shock: "traumatic intoxication." It was found that if a tourniquet were placed around the lower extremity well above extensive lacerating wounds, little or no shock occurred. As soon, however, and after a variably long time the tourniquet was removed so that the said toxic absorption began, shock immediately appeared. The situation was often saved by wide and deep removal of the sloughing absorbing mass down to healthy tissue. If such situations arise when drainage as in a wound of the extremity is relatively good, how much more must they arise when drainage cannot possibly be perfect as in the bladder and annexa?

A serious surgical error violating these principles, which the author has never made because of his cautious surgical judgment, is only recently being corrected by the rank and file of operating urologists. The error consists in widespread electrocoagulation of bladder tumors with the high-frequency current developing so-called surgical diathermia and applied to the surface and depth of the tumor usually with flat button-type of electrodes. This action was limited through the thermometric estimate of the results of the current. It is now known that in large measure the index of a thermometer during such an operation is vastly less reliable and important than due knowledge of the destruction, decomposition and alteration of the tissue attacked.

The next error consisted in leaving the dead mass more or less as a whole in situ. The toxins from this sloughing deep field rapidly attacked and destroyed the patients with albuminoid poisons almost invariably during the first few days of immediate aftertreatment. In other words, "debridement" (cleaning up) of the entire field of operation as proved to be of inestimable value during the war received little or no attention by urologists in such cases. All consideration and judgment in these cases are the reasons why the writer has never used this form of mass coagulation of cancer of the bladder and has never relied on the thermometer as the best index. Apparently the method which he has always preferred is just beginning to be applied systematically by urologists.

Of course his opinions have had the advantage of careful study in electrotherapeutics arising from very many years of membership in the American Electrotherapeutic Association, and the New York Electrotherapeutic Society. Through these contacts the basic principles set forth hereinafter have been indelibly impressed.

It must be remembered that depending on qualities which cannot be detailed in a paper of this kind, the

\* Read at the meeting of the Section of Genito-Urinary Surgery of the Academy of Medicine, April 21, 1926.



high-frequency currents as developed by modern apparatus vary between a destruction of tissue in which the thermometric element is of little importance and what might be called sarcolysis (destruction of flesh) by a peculiar disintegration of the cells and fibrous tissue which is of importance. Such currents belong to the cutting type permitting one electrode to travel through flesh almost as a knife does but so altering it that bleeding does not occur as a rule at least from the small vessels. Currents of such potency cannot be advisedly employed on tumor masses, as in the bladder, because of their inaccessibility for enucleation by such a knife action.

Currents of slightly less potential and of different character are available for coagulating these tumors, preferably not in mass because of the foregoing fatal intoxication but in layers precisely as described in the technique in the case herewith reported. If such a current is applied to a piece of raw meat and its path divided the proximal layer is carbonized, the next layer densely coagulated and the third layer delicately coagulated. This definite consistent result permits cleaning off the first two layers down to and partially through the third layer preferably short of bleeding in removing a tumor. The same process is repeated step by step until the tumor is removed as fully as can possibly be done by any method whatsoever. When properly conceived and carried out the deep field remaining is part of the delicately coagulated third layer which should not bleed and which because of its limited mass will not cause toxic death of the patient.

No cautious mind ever flatters itself that tumors of the bladder of this deeply seated type can ever be literally removed. The tendency toward extension of bladder tumors incident in the factors described in the opening of this paper only emphasizes the importance of preoperative treatment of the patient with radium or x-ray and similarly the same postoperative measures. Radium is inviting but at least the needle method of application directly disturbs the tumor and may be a factor in irritating it because after all radium is very localized in action. The x-ray has not yet come into its own chiefly because of the futile effort through the past ten years at mass-dosage. Some day, perhaps, the profession will grasp the unalterable fact that single mass-effort to cure anything whatever cannot succeed. Far from localized, the action of x-ray is distributive. Therefore, the entire pelvis from the lower abdomen and from the perineum may be treated and likewise the balance of the body including the kidney zones may be treated,—all in prevention of extensions. One of the most learned papers on x-ray therapy extant is that of Holzknecht.<sup>1</sup>

Perhaps again the cautious judgment of the author prevented him from ever applying any x-ray treatment except the fractional crossfire dosage. Be that as it may, he always applies at least from six to twelve such treatments to the pelvis and lower abdomen before operation and from six to twelve such applications as soon after operation as possible. Radiant light is alternated with it because for reasons difficult to explain physiologically radiant light greatly protects the skin from irritation.

**History:** H. . . . . U. S., white, 66, single, salesman, Case No. 15356, Jan. 25, 1926. Referred by Dr. S. A. Hardy.

**Diagnosis:** Hypertrophy and neoplasm of the bladder complicated with cystitis.

**Family History:** Negative for neoplasm and otherwise irrelevant.

**Former Personal History:** Negative except for pneumonia without renal or other complications, or by any other urological conditions.

**Former Sexual History:** So moderate as to be practically negative.

**Former Venereal History:** Negative.

### Present Illness

As an old-fashioned stoical patient, he probably disregarded the early signs of prostatic hypertrophy, followed by the disturbance of neoplasm until March, 1925, when incontinence, nocturnal and diurnal, pain in the penis and perineum and intense ardor urinae appeared, but without bleeding. The first hemorrhage appeared in December, 1925, and was rapidly followed by other and increasing hemorrhages. His family physician recommended cystoscopy as the symptoms augmented, which was accepted only when the bleeding alarmed the patient. Thus again we have the pathogenesis of the civil conditions and mental inertia of patients frequently as great an obstacle in the relief of disease as the disease itself. At his first visit the following were the subjective symptoms. Pollakiuria marked by night and day. Stream small and decreasing. Urgency great, control usually complete but difficult. Chattering of the stream frequent, followed by dripping and obstruction, so that frequently he was obliged to break wind in the effort to complete evacuation. The condition of the bladder wall at operation proves how great this obstruction was, how gradual its onset, and how little attention it attracted on the part of the patient. Pain was great chiefly in the bladder while distended. Frequently lasted for twenty-minutes after evacuation and so marked that the patient was obliged to sit down. Except for interruptions to urinate, sleep normal. Flatulence marked especially during urination. Constipation definite but variable.

### Physical Examination

General appearance normal for age; weight about 140 pounds. On the whole a spare, nervous individual, not in excellent condition. Prostate hard, generally hypertrophied, spherical in form, and neither nodular nor spotty. Urine I with straining, turbid, foul, ounces 4, definitely bloody. Urine II with straining of the same quality and practically a few drops. Residual through a soft 18 F. catheter, ounces 10, of the same quality as Urine I. Urethra 9½ inches long. No attempt to determine its caliber owing to the bleeding.

### Cystoscopy

Brown-Buerger cystoscope easily introduced after vesical anesthesia with 2 per cent novocain and urethral anesthesia with 4 per cent novocain. Capacity of the bladder much reduced, not definitely determined for fear of accentuating bleeding which was so active that the cystoscopy had to be completed on the continuous irrigation principle. Obvious and extensive hypertrophy associated with a large papillary carcinoma surrounding the urethra but seemingly coming from the retropubic zone of the bladder, in other words in the superior hemisphere of the bladder. Because the cystoscope had to pass through the papillary mass, and because a full cystoscopic field could not be developed, the error as to the origin of the growth was natural. At operation it was found to arise from the trigonal zone of the bladder very close to the urethra although not directly involving it. Trabeculations and cystitis marked.

### Treatment

After the usual management in such cases and the administration of urinary antiseptics attempt at removal of the growth was recommended preceded by a course of six treatments by x-ray by the divided dose cross-fire

<sup>1</sup> Holzknecht says in substance two important things. First, that the older crossfire fractional dose of X-ray temporarily discarded through the frenzy for the mass-dose is the only wise method of applying X-ray; and second, that ten years have been lost to the profession in the study of fractional dose treatment through the diversion to mass-dose measures.



method and followed by six duplicate treatments as soon as possible in the convalescence.

Under sacral and parasacral anesthesia, suprapubic cystotomy easy after free and nearly complete mobilization of the bladder. The subperitoneal zone was freed with so much difficulty that it was supposed the cancer was practically widespread and of the infiltrating type. On incizing the bladder its muscularis was found to be fully one-quarter inch thick, revealing the intensity of the obstruction alluded to above. The incision was extended upward and downward for the freest possible exposure of the deep field in which the cancer was found as previously stated very close indeed to the urethra sessile and covered with long papillary extensions which floating in the urine caught in and closed the urethra thus leading to the hypertrophy of the muscularis. The free mobilization of the bladder permitted wide retraction with narrow copper ribbon retractors and very easy access to the growth.

Electrocoagulation was employed using the damped high-frequency current of such potential that the superficial layers of the growth were carbonized, the next layer densely coagulated and the deepest layer slightly coagulated. A sixty square-inch metal electrode was placed under the buttocks well soaped for perfect contact and the hand-electrode was a well-insulated copper electrode brought to a sharp point. An air-gap of about one-quarter inch was maintained between the point and the growth not only to intensify the spark but also to keep every step of the work directly under the eye. No thermometer to determine the thermomtric heat was at any time employed. As soon as the surface of the growth was carbonized in this way all the tissue was carefully removed with a sharp rongeur to minimize the traumatism of the cancer and then another field of electrocoagulation developed and removed. These steps were repeated until every vestige of the growth was gone as far as naked eye and finger could determine. The growth was so situated that the only other operation which could be thought of was transplantation of the ureters and removal of the whole bladder and prostate which the patient would probably never have survived immediately and which remotely would not have benefited him because the situation of the cancer and its traumatism by the action of the bladder have already extended the growth far into the lymphatics beyond the reach of any surgery. Therefore any operation including the one performed must belong to the temporary and palliative type as duly explained to and accepted by the family physician.

The bladder was closed most carefully by banked layers of sutures down to a 22 F. Pozzi retention catheter, held firmly in place by the last suture which almost constricted its tube. A cigarette drain was passed into each lateral depth of the retropubic space. A Pozzi retention catheter size 22 F. was passed into the urethra through the bladder. The abdominal wound was closed in the usual way and a small dressing applied with wide and extensive adhesive plaster support.

#### Aftertreatment

Both catheters drained perfectly and because they did not irritate were left in for nine days. The cigarette drains were removed at the end of twenty-four hours. The wound healed by primary intention down to the drain. The convalescence was without incident. The patient was discharged from the hospital in about two weeks with only a sinus persisting, which healed in about four weeks. Postoperative cystoscopy revealed a very good condition of the deep operative field with the cancer seemingly destroyed.

In the immediate aftertreatment two minor accidents

of interest occurred. Detritus and decomposition from the urine nearly blocked the suprapubic catheter so that it lost much of its compressibility. Therefore when traction was carefully put on it during removal its tube broke off about a half inch from the bulb. As it had been so tightly secured in the wound, a whalebone filiform was passed into the bladder and a 22 F. sound threaded over it. Although the whalebone under the magnifying glass did not show any degenerative changes, the sound buckled it upon the floor of the collapsed bladder and broke it off. While withdrawing the sound, the fragment came back through the sinus but not to the surface of the skin. A cystoscopy revealed the bulb of the catheter which was easily removed and also about a quarter inch of the whalebone which could not be reached because the instruments could not be directed so high up and so near the neck of the bladder.

A crochet needle as large as could be inserted and moved about in the sinus was passed down the right hand surface of the sinus as closely as possible without trauma. The instrument was then moved upward against the bladder and the hook rotated so as to be at right angles to the long axis of the body, parallel with which the larger part of the fragmented filiform must lie. The crochet needle was then slowly passed to the opposite side of the body maintaining the utmost penetration. These three manipulations necessarily would reach the filiform in all ordinary relations and circumstances. Maintaining the position of the crochet needle accurately, it was steadily withdrawn, caught the filiform and delivered it to the open air so that it was easily removed from the sinus with artery forceps.

This report must be regarded solely as one of an ideal primary result. The physician and one member of the patient's family have been plainly told that the growth will certainly return if not in the bladder then in its annexa or higher up in one of the organs or lymphatic glands of the abdomen. The significant thing about the case is the total absence of any infectious absorption arising from sloughing coagulated cancer tissue and the definite and precise manner in which the coagulation is secured and the sloughs removed. To the author this definite technique appears to give the greatest possible promise of success in those cancers in which excision cannot be performed—success in the sense of prolonging the patient's life and promoting his comfort for a long period of time.

The writer is not aware that this particular technique has been fully tried out according to literature. Urologists are now unanimous or nearly unanimous in the doctrine that the treatment of cancer of the bladder should be accompanied and followed by such radiotherapy as radium needles implanted in the stump of the growth and radium or x-ray later applied. They are much less unanimous in providing for a good course of x-ray therapy preliminary to any operative intervention.

Moreover the writer is not sure that the precise method of removing the cancer layer by layer has been previously described, deliberately observing the detail of a definite spark gap between the active electrode and the growth in order to augment the potential. There is a voluminous literature upon the subject of removal of cancer of the bladder by electrocoagulation. Only two reports seem to be closely similar in the method described to that which is contained in this contribution. These are the studies of Thomas and Pfahler in 1921.<sup>2</sup>

<sup>2</sup> "Technic of the Treatment of Carcinoma of the Bladder and Prostate by a Combination of Surgery, Electrocoagulation, Radium Implantation and Roentgen Ray," B. A. Thomas & G. E. Pfahler, *Journal of the A.M.A.*, 1921.

(Concluded on page 152)

## Gastric Lavage in Glycosuria

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and

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Gastric lavage yields a startling decrease of urine sugar with an increase in and an amelioration of subjective complaints. The patients, subjected to the lavage, all showed between 0.75 per cent and 3.0 per cent sugar in the urine, though on diet and small amounts of insulin. The results follow:

### URINE SUGAR PER CENT

Insulin and diet Per cent		Lavage alone		HCL alone	
Before lavage	After	Before	After	Before	After
1.6	0.5	0.75	0.0	1.0	0.2
0.75	0.2	1.0	0.1	1.5	0.4
1.0	0.1	1.5	0.2	0.75	0.2
2.0	0.25	0.8	0.0	1.25	0.25
1.25	0.3	1.25	0.1	1.0	0.3
1.5	0.2				
0.75	0.1				
2.25	0.25				
1.0	0.1				
0.75	0.1				
1.5	0.2				
3.0	0.1				

### INSULIN AND DIET \*

Per cent before lavage	After lavage
3.0	0.25
3.0	0.3
3.0	0.5
2.0	0.2
3.0	0.25
1.0	0.2
3.0	0.4
1.0	0.2

\* These patients receive insulin only on clinic days, Tuesday, Saturday and Thursday afternoons.

It has been our custom immediately prior to the lavage to take the quantitative (Benedict) sugar per cent of the urine from the sample brought by the patient; and on the visits following the use of the stomach tube the per cent was again taken. Curiously enough, the urine sugar per cent has been consistently lower and has remained so for varying lengths of time (over five months in one case).

In all our cases the lavage resulted in the expulsion of an abnormally large amount of mucus. Free hydrochloric acid was greatly diminished or absent, and the combined acids markedly decreased:

### GASTRIC CONTENTS

Combined acid	Free HCL
12	0
18	0
15	4
8	0
20	2
12	0
22	8
10	0
14	0
6	0
20	4
12	0
8	0
12	0
10	0
14	2
12	0

8	0
18	6
12	0
7	5
8	4
1	0
8	1
9	2
12	3
7	2
10	0
13	4
8	3

The urine in all these cases was free of acetone and diacetic acid.

This suggested the use of 10 min. dilute HCL t. i. d. p. c., the patients being put on an unrestricted diet. The results are, to say the least, gratifying (see first table). In many instances, due to hypermotility of the stomach, lavage had to be performed within 30-45 minutes following the ingestion of the Ewald meal, as otherwise the meal passed into the duodenum, was absorbed and gave an increase of sugar.

According to Howell,<sup>1</sup> "the acid of the gastric juice upon reaching the duodenum produces secretin; this in turn is absorbed by the blood, carried to the pancreas, and stimulates this organ to activity."

Sahli<sup>2</sup> makes the statement that, "hydrochloric acid is found to be diminished not seldom in diabetes mellitus."

Epstein<sup>3</sup> asserts that, "gross pathological affections of the pancreas, in the majority of cases, do not produce diabetes"; and he quotes Allen, "But it is striking what advanced degeneration of the pancreas can thus be produced, without diabetes, in contrast to the relatively slight changes found in diabetic men, women, and animals, in connection with spontaneous diabetes."

MacCallum<sup>4</sup> likewise mentions, "It is true that in many cases of diabetes it is difficult to demonstrate any lesion in the pancreas, and then it may be necessary to assume that some extra-pancreatic cause has brought about the disease, but in some studies, as that of Cecil, changes in the islands are found in an overwhelming proportion of the cases." Epstein states that, "Baker, Dickens and Dadds reported 'that the organs of a diabetic patient, dying in coma, contained insulin in quite large quantities, indicating that death was not due directly to its absence,' and then Epstein goes on to conclude, 'nevertheless the prompt symptomatic response that follows the administration of insulin in sufficient amounts to a depancreatized animal or diabetic patient indicates that the disease is due to an insufficiency of active insulin.'"

Joslin in the discussion following Epstein's paper in answer to H. Schwartz of New York, said that we are unable to raise the tolerance of a patient after having given insulin for any length of time.

We believe the disturbance of the mechanism in diabetes to be somewhat as follows: toxins are present in the stomach; excessive mucus is secreted by the stomach against the toxins, but interferes with the acid secretion of the stomach (as the acid forming cells of the stomach

have undoubtedly sustained permanent injury, gastric lavage gives a temporary improvement, which is logically well supplemented by the addition of dilute HCL). Since insufficient acid is present in the stomach, insufficient secretin is formed in the duodenum. Hence, insulin though present in the pancreas, is inactive, for it must be present in the blood before it is capable of regulating the carbohydrate metabolism of the body.

Gastric lavage, routinely employed, washes out the toxins and excess mucus, leaving the production of gastric acids unhindered (in that portion of the acid cells still able to function); as more acid is present, more secretin is formed, stimulating the pancreas to secrete more insulin with the resultant marked improvement in the sugar metabolism. True, this explanation presupposes and suggests an extra-pancreatic cause for diabetes; nevertheless, we cannot with a flourish of the hand sweep away the consistent beneficial effects of gastric lavage and HCL therapy; and then, too, this explanation is more in accord with the above quoted scientific data than any other.

### Conclusion

Whatever scientific investigation may later adduce, the symptomatic improvement of the diabetic patient and the decrease in urine sugar following the routine use of stomach tube and dilute HCL will be noted. Though realizing that this is the report of but a single clinic and of a relatively small number of cases, we present it for attention of interested workers, trusting that this may stimulate others to a consideration of diabetes mellitus from other than merely the dietetic and insulin therapy standpoints.

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## Fishing on Santa Monica Bay

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This is the story of a shark.

Every now and then most physicians get the feelings that they'd like to get away from daily routine, and secure lots of fresh air and get real soiled when getting it. A deep-sea-fishing-trip fills the above prescription excellently. Such a trip can be, and is made, de luxe by some folks. So can deep-sea fish be bought in the smelly market-places.

We take ours just like the Eastern tourists do—"One buck (\$1.00) for half a day, two for all day," in old clothes, carry our lunch and drinks and we catch clean and eat fish, excepting those we give away, together with certain varieties like sting-ray, star and jelly fish, etc.

The irrepressible feeling came upon us and March 21, 1926, saw us at the Municipal Pier, on Santa Monica Bay, at seven-thirty in the morning. Here the devotees of the piscatorial art gather like barnacles on a ship. The "Colleen" was soon sailing, rocking, rolling and pitching seaward through the fog for a distance of about ten miles. It was not long before the fog lifted and the enchanting shore line was easily visible. A few of the passengers fed the fishes their morning repasts. Mal de mer is not fatal, but its devotees often wish it were. An absolute cure for it is—"Spend your time on land."

Fishing with live bait began as soon as the boat was at anchor, where the water was about two hundred and fifty feet deep. Such fish as yellow-tail, bonito, barracuda and bass were not running, as the season was a little too early for them, but mackerel, rock cod, sandab, halibut and shark were plentiful.

Shark is the real cause for this story. The first shark's dorsal fin was sighted when a red rock cod fell off a fisherman's hook after being pulled up from a two hundred and fifty foot depth and floated away with its eyes exophthalmic and its air bladded sticking out of its mouth. The shark vied awhile with the gulls and pelicans in eating it. At the same time several of us baited with dead mackerels and fished for that shark. At a depth of fifteen feet the shark snipped off a bait and the copper wire leader with his razor-like teeth without making the slightest tug on the line.



The Scribe and Capt. John Creighton and The Shark

Bye and bye a blue shark was snagged through the underlip—a fortunate hold—and gently pulled to the surface alongside the boat where a gaff could have been used had we not wanted the sport of "play."

The family of shark is one of variety; among them the tiger or "man-eaters," the hammer head, the leopard or spotted and the shovel-nose.

It is seldom that the oil and real estate sharks are caught at sea.

This blue one, sensing he was caught, suddenly took away and reeled out about two hundred feet of twenty-one ply line against a thirty pound break on the reel. The rod, a split bamboo, weighed twenty ounces. From then on there was plenty of action, reeling in and paying





Frank Tiara kidding about the Big Fish

out, under protest. He circled the boat and at one time had out over three hundred feet of line. He was out of sight from the first until the last five minutes of the thirty minutes' fight.

My arms, back and legs had kinks in them and water was oozing from every pore. He was finally brought alongside and gaffed by the Captain, his throat cut and he was allowed to bleed to death before being pulled aboard. He was then photographed and thrown overboard. His captor was through for the day and it took two weeks for my hands to get rid of the cuts and bruises of that battle.

For general information, shark hide is tough and makes good belts, pocket-books, etc. This shark did not turn on his back to take his food, although the tale is that a shark must do so because his mouth is so situated. Some folks eat shark meat and say it is as good as any big fish. There is no reason why it shouldn't be, as it eats the same food as other edible fish.

It is said that a shark's eye prepared in hardening compounds makes a nice jewel for stick-pin or ring; and that the vertebral column with a metal rod run through it polished and varnished makes an ornamental, serviceable cane. Maybe so! Those who like grotesque might admire a dried shark's fin for a hat ornament or the teeth for a necklace!

We don't.

#### Neosalvarsan in Lichen Ruber

The experience of Novelli makes it possible for him to confirm the results which other authors (Truffi, Leidi, Ramorino) report in the Salvarsan therapy of lichen ruber. The effects of this preparation upon dermatosis cannot be explained, as the etiology of the disease is still unknown.

All authors concur that arsenic has to be administered in increasing doses, as Leredde remarks "the application of the metal in weak doses over a protracted period constitutes a worthless therapy, which may result in more harm than good." A few authors even contend that a certain intoxication of the organism has to be brought about through arsenic, in order to effectively combat the disease. Through intravenous arsenic injections intense and prompt effects can be obtained without in any way approaching the limit of toleration, if a similar amount of arsenic had been administered orally or intramuscularly. The effect of neosalvarsan is not due to the fact that it possesses specific elements against dermatosis, but is primarily due to its high arsenic content, which metal can be given in high doses and which exercises a rapid and profound effect.—(*Klin. Woch.*, Feb. 5, 1926, p. 240.)

#### America's Crime Problem (Continued from page 136)

concern ourselves with his physical, mental and spiritual rejuvenation.

And here let me suggest that there is one thing that this organization can do at once. That is, to undertake the strengthening of the law regarding probation and parole of the insane. The Noel case is fresh in our minds, as well as the attempt upon the life of Dr. Minas S. Gregory, the Director of the Psychopathic Division of Bellevue Hospital, by a released insane person. The latest available reports show that eight per cent of those booked in insane asylums in this country are now on parole.

New York State has been fortunate in having Governors who have not pardoned wholesale, as has been done in South Carolina, in Nebraska, in Oklahoma and in Texas, but we should relieve our Governor of his pardoning and commuting powers.

If it takes twelve men to put a man into jail, why should it not take twelve men to free him before the end of a definite term?

Our whole system of criminal jurisprudence and penology needs reforming.

If we are to safeguard our liberties as was intended by the founders of this nation, there is a great individual responsibility resting upon each of the members of organizations like the Society of Medical Jurisprudence militantly to help in creating a public sentiment that will demand that the ideals, traditions and institutions for which our forefathers worked, fought and even died shall be maintained and perpetuated.

These things we must do as individuals if we love our community, our city, our state and our nation.

The most honorable thing which a human being can do is to serve, and service to city, state and nation in time of peace as well as in time of war is akin to service to God.

#### Discussion

Mr. Lionel Sutro, President New York County Grand Jurors Association, said:

"In my opinion, the present trouble is that we are concerned more with talking about the crime problem, instead of taking action.

"The medical profession states that many of the criminals are insane, and, therefore, if the Society for Medical Jurisprudence would insist upon incarcerating the incurably insane, so that they could not prey on society, that those who are curable should be held until they are declared cured, it would be a step in the right direction.

"Further trouble at present is that there is too much sympathy for the criminal, and too little protection for society. We are all agreed that we wish to avoid the insane, but the way in which the criminal classes are now guarding their constituency shows that they are more protected than society. I feel the reason for this is that all of us think the easiest way to accomplish anything is to go on the theory of 'letting George do it.'

"America's crime problem is of vital importance to the entire nation, and we criticize all our authorities, losing sight of the fact that there is an irresistible pressure brought to bear upon them, both political and social, that cannot be withstood, and keeps them from doing their entire duty, owing to the fact that they are held up as heartless and unsympathetic, when they wish to keep such people in custody, as, for example, Noel, and others, who were known to be insane, but were allowed to prey upon society with unspeakable results.

"Your organization is undoubtedly powerful enough to stop such actions locally. Your organization must aid the authorities in securing the men and the means to accomplish the results required of them in coping with the crime wave, and until this is done it is useless to continue to complain.

"I have been informed that the United States jewelers are working independently, and are assessing themselves 5 per cent of their insurance in order to track down and prosecute the criminal who is to receive a fair trial, and, if found insane or guilty, the proper action will be taken to cure him, or punish him, without any interference of political or social pressure.



"A committee of members of various Grand Jurors' Associations of Greater New York visited police headquarters, and we were informed that there are six different places where prisoners are fingerprinted and recorded; and it is within the range of possibility, even though not probable, that a criminal, being sought for a major crime, can be arrested as a vagrant, be fingerprinted, and recorded by one department, under a different name, sentenced for a period of time to the workhouse, and thus escape the police; and so the consequences of the result of his crime; and then when he secures his liberty, and the search for him has somewhat subsided, he is again free to prey on society.

"As regards the organization of the criminals, it is alleged that bail is furnished by professional bondsmen, and during the period that the man, charged with the crime, is out on bail waiting for trial, his friends intimidate the complainants, so that they fear to act as witnesses when the trial takes place. It is further alleged that frequently there is a tacit understanding between the bondsman and the criminal that he will pay for the cost of being bonded by the proceeds of any crime he commits while being out on bail.

"It seems that society itself stands by, complains, but does not organize, in order to cope with this situation. Even our Grand Jury service, which is a part of the system to cope with the criminal classes, is utilized by some men for the purpose of avoiding their responsibility to serve on the Petty Jury, and even when summoned for Grand Jury succeed in avoiding their duty."

Chauncey S. S. Miller, Esq., chairman of the Committee of Twenty-five of the Grand Jurors Association of New York, Bronx, Richmond, Queens and Kings, said: "Mr. Tuthill, I think, has not only summarized conditions but has suggested remedies. But a burned child dreads the fire and there still remains the necessity for unity of action. There appears to be a beginning of this unity of action among the grand jurors of the five counties of this city. Mr. Sutro whom you have just heard is chairman of a committee which is endeavoring to see if steps cannot be taken to establish a central identification bureau. Another committee is seeking to get more policemen appointed to the force.

"In all, seven steps must be taken. The first is less jury exemptions. If anyone near and dear to you suffers any injury that requires a legal procedure to adjust, would you care to have on that jury no clergyman, no physician or surgeon, no dentist, no pharmacist, no attorney or counselor-at-law, no school teacher, to decide on the justice of the plea? There are now 31 class exemptions. If there were less exemptions we would have better juries and fairer verdicts. Richard Washburn Child brought out the fact recently that this, the most cosmopolitan city in the world, has less police protectors, in proportion to the population, than any city he could name, cities where there is far less crime than there is here. In no city in the world is the traffic problem as great as it is here so there is a large local patrolman diversion in that direction.

"The second step is no parolement and the third is no Parole Board. If I am a criminal I know that there is only one chance in twenty that I will be arrested for a crime that I have committed; only one in a hundred that I will be convicted, and but one in one thousand that I will serve more than two-thirds of the sentence given to me. When Chairman of the Parole Board Benham appeared before the New York County Grand Jurors Association he said that 80 per cent of the paroled prisoners went straight, but others assert the figures do not bear him out. Judge Thorpe of Greene County told us that it was not uncommon for him to have a man come before him as a prisoner who had been paroled seven times.

"The next step is to impose a double penalty if any weapon is used in the commission of a crime. When the Vigilantes were in power in the West every man was a Vigilante. They summarily punished the horsethief by unified action; and now they say that the way to punish the automobile thief is to act as they did with the horsethief.

"Next, revolvers should not be allowed in the possession of any but police officers. If you put a lethal weapon in the hands of every man, woman and child crime will increase. But how absurd it is that no honest man can have a weapon of defense when any criminal can have one, anywhere obtained by mail if any state law inhibits local purchase.

"The next step is that bonds given when the criminal is convicted and when he violates his parole shall go to the victim of the first crime.

"Now for the last step. Does any honest individual deny his identity? No. Then why should not every man, woman and child in the population be finger and footprinted so that he may be identified and the record kept in a central bureau. In a case of amnesia this would be very valuable, as it would be in a death by accident; but above everything else it would make it more difficult for the criminal to work his way across the state boundaries there to commit other crimes.

"My service on city, county, state, and Federal juries has emphasized in my mind the necessity for less exemptions from jury

duty, and for more police, because it is obvious that those we have cannot cope with the curious situation that exists in this huge cosmopolitan city. Third, that there should be no Parole Board. When the question of paroling a prisoner comes up the district attorney is notified, but the judge who sentenced him is not notified that the matter of parole is coming up and no representative of the victim ever appears before the board. Fourth, double penalty for a crime committed with weapons. It is easy to see why this should be imposed. Fifth, bonds to the victim. If I assault you, that is one thing; if I rob you, that is another. But if I kill you, those dependent on you suffer and there is no compensation for them. Something should be done for those dependent on the slain."

M. L. V. Etynges said:

"I bring you a distinct challenge, because I am NOW under parole. When Mr. Miller says 'Abolish the Parole Board,' I say 'NO.' Actually, when efficiently managed, the parole system and indeterminate sentence keep the average prisoner behind walls from eight to fifteen months longer than a definite sentence does. This is proved in the ten year tables of both Ohio and Indiana. Do not let any judge, no matter how intelligent or sincere, fix the sentence. One is sentenced to prison for the protection of society and should be kept there indefinitely until he is a fit subject for return.

"Since so much has been said about the abuse of the jury system, I do not mind saying that my experience leads me to recommend that we abolish the whole jury system. Let our trials instead be held before three judges, sitting en banc, majority verdict to rule; for our criminal courts have degenerated into oratorical duels and fencing over technicalities, with the district attorneys on one side and the highest priced shysters on the other. Abolishing the postponements and continuances and the multitude of writs will result in speedier trials and speedier justice. Give us CELERITY of justice, Certainty of Justice and Character of Justice. Examine all offenders before trial, by competent psychiatric authority to determine one's responsibility to the law and you will stop the abuse of the insanity defense and deodorize the 'medical expert' testimony stench.

"My own experience covers twenty years. I went to prison, originally, for forgery. The judge gave me a short twelve months' sentence; he did not know my history. Another man for the same charge because he was in bad odor with local officials was given ten years, although he was an accidental type of criminal while I was professional. Wipe out the inequalities of judge-made sentences. Sentence men to corrective institutions until they react promisingly to your curative programs or to stay there UNTIL THEY ROT! Take politics out of your criminalistic processes. The moment you may be able to take politics out of your prisons you may be able to put some of your professional politicians in prison!"

Dr. Walter N. Thayer, Jr.:

"I have listened to the paper and the ensuing discussion with much interest. My reactions to the suggestions are perhaps colored by the fact that many years of service in prisons and reformatories have created rather positive opinions relative to our criminal law and as to the methods employed in our institutions. In relation to the parole law, I might say, I was acting in an official capacity in one of our prisons when this law was placed upon the statutes. It has not been as efficient as we could desire, but I would not wipe it out of existence for that reason. The idea of parole is right. It is the way in which it has been operated that is at fault.

"Our criminal law operates on a punitive basis. The penalty is assessed in proportion to the damage done or according to the manner in which the crime is accomplished. These two factors determine the degree of crime and the sentence is fixed by the degree.

"Why should the degree of crime, particularly in crime against property, be considered at all? When a thief sets out to do a 'job' he will take all he can get and if it happens that the plunder is less than \$50.00 he can be punished for petit larceny only. I have yet to hear of the thief taking only \$49.99 and leaving the balance. If then, conditions over which he has no control determine the degree of crime, we are permitting the thief to assume credit for the absence of opportunity to commit a more damaging depredation.

"We are advocating at Napanoch 'the substitution of treatment for punishment of the criminal.' Commit the thief to prison, not because he secured a certain amount of plunder, but because he stole. Commit him as you would a lunatic for the protection of society and keep him locked up until he is fit to be liberated. We should not ask our Judges to prophesy when a criminal will be fit to return to society and this is, to all intents and purposes, what our criminal law requires our Judges to do. Every person convicted of crime should have a thorough scientific examination to determine what sort of person we are dealing with and the type of treatment indicated. The minimum term should be sufficiently long to be deterrent and, at least in the cases of habitual criminals, there should be no maximum expiration. Eco-

nomically it is cheaper to retain the habitual criminal in an institution than to suffer his depredations and pay for his repeated apprehension and conviction. Protect society in this manner and we will get somewhere.

"I do not think expert testimony has any place in the trial of the case. Society is entitled to protection from the anti-social individual whether he be sane or insane—responsible or irresponsible. His mental condition should indicate simply the type of treatment or segregation required.

"Abolishing the parole board would be a backward step. Furnish our parole bodies with scientific assistance and do not permit them to parole men purely on the basis of their institutional records—find out what sort of man you are dealing with and treat the man not the act.

"Our present methods might be compared to releasing patients suffering from infectious diseases at the end of a fixed period, regardless of the menace such a procedure would be to society. We can culture the throats of diphtheria patients and test the discharges of typhoid patients, thereby determining when it is safe for them to mingle with their fellows, but we must discharge a prisoner at the time fixed by the Court, although there may be every indication that his attitude toward society has not been changed by the punishment inflicted."

Mr. Robert Anderson Pope:

"The speaker referred to the high percentage of crime among the second generation of aliens. Our immigration laws make it impossible for any alien to come to this country with a criminal record abroad. Criminal tendencies and imbecility are characteristic of certain families and we should be on guard to eliminate those potential criminals. There is one other point I would like to make. There are a number of criminals in England, but there are less than we have. If we had no prohibition law on the statutes to-day we would have less crime. I know there is a large percentage of lawbreakers, but we have laws that cannot be respected and we should abolish them and have a system whereby a small majority cannot inflict its will on the large minority. There is a close connection between economic conditions and crime."

Dr. L. W. Zwisohn:

"Why do criminals increase?

"Why are our criminals mostly young people?

"Why are there more criminals in this country than in any other country?

"1.—Because the teaching of morality to our children is neglected. The respect for parents, for elders, and obedience to law should be inculcated in children from babyhood. Ethics and morality should be taught in the schools.

"2.—The teachings that crime is inherited should be prohibited. For, it takes away free will. Why should one be punished for an act over which he has no control? I have heard it discussed among college boys and girls.

"3.—The law's delay and escape of punishment is an inducement to the criminal to take chances.

"4.—The suspension of sentence for the first offense on the theory of giving the criminal a chance, works in the wrong direction. The criminally inclined knows it takes chances; failure to detect leads to habitual criminality.

"It is better surgery to remove a suspicious tumor before it becomes cancerous, than to wait until it becomes cancerous, when it is too late to remove it."

Axel Josephsson, Esq.:

"What we need, just as much as fearless judges, is a fearless and competent District Attorney in each county and competent assistants of such District Attorneys.

"Some time ago I prosecuted in a Magistrate's Court in Brooklyn a man, who had obtained sums of money from a number of working men by selling them alleged stock in his corporation under promise of steady employment at lucrative wages, which promises he failed to keep. He was held for the Grand Jury. I offered the Assistant District Attorney, then in charge of the Kings County Grand Jury, all the information in my possession so that he could lay the matter intelligently before the Grand Jury, but, though I took the trouble of going over to Brooklyn several times, he could not take time to even see me, much less listen to me. But he had time to waste the time of the Grand Jury by taking the case before them, evidently without having the necessary facts before him, because the Grand Jury refused to find an indictment in a very palpable case, for lack of sufficient evidence.

"Was this the fault of the Grand Jury or of that Assistant District Attorney?

"I had a man in New York County brought before a Magistrate for obtaining money by fraud. I tried the case and the man was held for the Grand Jury. He was indicted. When the case came up for trial after more than a year I was subpoenaed as a witness for the People. The Assistant District Attorney, who had obtained the indictment, asked me to talk the case over with the Assistant, who was to try the same. This Assistant was a lady. She had no time to talk to me, but said she would see me in the court room before the case was tried. The case was

called; she walked out of the court room and another Assistant went ahead and tried it; or rather tried to try it. He had the evidence in a portfolio, but probably had no idea what the case was about. He examined the complainant, but could, of course, not obtain the facts; the attorney for the criminal then moved to dismiss the indictment for lack of proof and the Judge granted the motion.

"I told the District Attorney that if a lawyer had tried a case for a client the way he tried it for the People of the State of New York, he would have been brought up on charges before the Bar Association. He asked me if I knew that he had the documentary evidence in his portfolio.

"The Judge heard my remarks and I was called up to the bench and asked what the trouble was; when he heard about it he said he was very sorry, but he had to dismiss because there was no evidence before him.

"Such acts as described show inefficiency, they make the law appear ridiculous and they protect the criminals, not the people. It must be because these positions are filled by political appointees, regardless of any ability to do their work properly."

Richmond J. Reese, Esq.:

"The last speaker referred to inefficiency in certain branches of the administration of justice. We have all agreed tonight that the way to deter crime is to have swift and certain punishment.

"I do not generally go into a criminal court, but recently I spent a morning in a Magistrate's Court, representing a client who was charged with felonious assault, because he had accidentally struck a man with his automobile. He was held in \$2,500 bail for General Sessions.

"That man is no more a criminal than any one in this room, yet he is charged with a crime just as if he had taken a weapon and deliberately assaulted a person. Such cases as this clog the calendars, so that a real criminal gets delays and postponements, until he and his crime are forgotten.

"Another reason why the criminal commits crime is, because many members of the bar are unscrupulous in the way they handle cases. They forget that the lawyer owes a duty to the community and every time that a lawyer tries to defeat justice and allows a guilty defendant to escape, he is breaking down the system of law and order which he has sworn to uphold.

"I believe the defense of criminals, as well as their prosecution, should be put in the hands of disinterested attorneys. There is no reason why a rich man should not be compelled to take counsel assigned by the court, who will look out for the interests of justice, as well as for the protection of the accused. Such public defenders would be paid by the State and all temptation to subvert justice would be thus taken from them."

Mr. Tuthill: "The discussion of the paper of the evening has been extremely interesting. But as long as many of us can remember we have had the lawyers defending and paroling the criminals, the doctors trying to doctor the criminals and the wardens and the professional reformers trying to reform the criminals.

"And see what a mess all of these men have made of it. I still maintain that 'extreme remedies are very appropriate for extreme diseases.' First, let us put the fear of God into these criminals, and then let us see what we can do for them after they have been immured where they can be observed without further danger to society."

#### Papillary Carcinoma of the Bladder

(Concluded from page 147)

and the other by Stevens in 1925.\*

\*"Treatment of Cancer of the Bladder by means of Surgery, Electrothermic Coagulation, Radium and the Roentgen Rays," *Urol. & Cut. Rev.*, pp. 74-9, February, 1926.

Study of these papers is warmly recommended.  
45 West 9th Street.

#### Milk Injections for Pelvic Infections in Women

George Gellhorn says he used ordinary milk rendered fat-free and sterile, as well as pharmaceutical milk preparations, such as Aolan. These, of the various protein substances, are most easily available and they are highly efficacious. Gonorrheal infection of the tubes and Bartholin's glands are most often amenable to protein therapy. Nongonorrheal infections of the genital tract also yield to the treatment. Puerperal infections, even of severe degree, frequently yield, and with surprising rapidity.—(*N. O. Med. & Surg. Jour.*, March, 1926.)

#### Abdominal Pain

Pain due to involvement of the abdominal viscera is sharp, colicky and paroxysmal in character, and frequently referred to the epigastrium; that due to peritoneal involvement is continuous, burning in character and referred to the site of the lesion.—(*Med. Jour. & Rec.*)

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## The End of Sex

Max Hartmann, the great German biologist, makes the rather startling declaration that he does not believe there is any such thing as sex in nature.

If 60 per cent of the cells are male, then the organism is male, and if 60 per cent are female, then the organism is female.

Absolute sex Hartmann believes to be a myth quite false and devoid of sense.

There is no such thing as a 100 per cent male, and there is no such thing as a 100 per cent female.

Sex is therefore a relative thing—a cold matter of percentage.

Living beings cannot be bluntly described as of one sex or the other.

We are really bisexual. In every male there is a certain amount of femaleness, and in every female there is a certain amount of maleness.

This idea of the bisexuality of man is not really new. One may truthfully say it is very old. Traces of it may be found in Chinese myths and it found a rather prominent place in Greek thought, as revealed in the narrative of Aristophanes in the Dialogues of Plato.

In later times a Gnostic sect (Theophites) believed and taught that primitive man was a "man-woman."

Darwin and Huxley make certain statements in respect to the probability of man's early bisexuality. It appears that many of the writers on evolutionary topics do accept such a theory of man's origin.

\* \* \*

About thirteen years ago a book was published in Chicago, the authors of which were Francis Buzzacott

and Mary Isabel Wymore. This curious book was devoted to proving that it was easily possible for man to regain his primordial state of bisexuality. According to these interesting writers, man would then be a perfect creature, having little need of other nourishment than the vital fluids of the atmosphere. He would be virtuous, vigorous, healthy, beautiful—free from every taint of corruption, decay, pain, sickness or weariness; even eternal life might be attainable; all the social problems resting upon artificially ordained sex inequalities would be automatically solved; and there would be other advantages, chiefly spiritual in nature.

This book told all about how man fell from biological grace, but its most remarkable feature was the attitude of its authors toward the practicability of re-attaining the sexual Nirvana when each human being reproduced "itself," just as in other departments of nature one finds organisms reproducing themselves by simple fission, or cleavage.

\* \* \*

Perhaps there is something in the traditions or "myths" of ancient peoples, many of which assert the bisexual nature of the gods—who were simply men of extraordinary longevity and supernormal powers. The Hermaphroditus in the Louvre is such a god.

In 1906, before the Chicago production we have noted, there was a very remarkable book written on this subject by a young German genius named Otto Weininger, who committed suicide while still, we believe, in his twenties. He formulated very carefully the principles governing modern man's psychological and psycho-physical bisexuality.

Man to-day only occasionally reverts (atavism) to his former bisexual state in anything like its ancient completeness. In some of our "cake-eaters" the reversion is obvious enough, but we are rather dull about discerning the same thing when it occurs in other than the physical sphere.

It is in the spiritual, intellectual and emotional spheres that we must learn to look for bisexuality. In their *Psychology of the Poet Shelley*, Carpenter and Barnefield have given us a fascinating study of a bisexual genius.

The fact is that males and females, each and all—according to Weininger—are like two substances combined in different proportions, but with either element never wholly missing. We find, so to speak, never either a man or a woman, but only the male condition and the female condition. Any individual, "A" or "B," is never to be designated merely as a man or a woman, but by a formula showing that "it" is a composite of male and female characters in different proportions.

Weininger gives us these formulas in mathematical form, but these we omit because of their complexity.

Doctors and anatomists, of course, see much significance, generally missed by other folk, in "men" with narrow waists, soft skins, and overgrowth of the hair of the head, not to speak of other phenomena, and in "women" with small hips, short scalp hair, strong muscles, angular contours, deep base voices and chin beards, but we shall dismiss all such considerations and confine our remarks to the mixed make-up of the apparently orthodox types.

We assume, too carelessly, that every "John" and "Mary" are representative of their sexes because they have been almost arbitrarily dubbed "male" and "female."

An ideal man, M, or an ideal woman, W, considered as sexual types, do not actually exist, according to Weininger. There exist only all sorts of intermediate conditions between male and female—sexual transitional



forms—absolute conditions never presenting themselves.

"In private conversation or in society, in scientific or general meetings," says Weininger, "we have all taken part in frothy discussions on 'Man and Woman,' or on the 'Emancipation of Women.' There is a pitiful monotony in the fashion according to which, on such occasions, 'men' and 'women' have been treated as if, like red and white balls, they were alike in all respects save color. In no case has the discussion been confined to an individual case, and as every one had different individuals in mind, a real agreement was impossible. As people meant different things by the same words, there was a complete disharmony between language and ideas. Is it really the case that all women and men are marked off sharply from each other, the women, on the one hand, alike in all points, the men on the other? It is certainly the case that all previous treatment of the sexual differences, perhaps unconsciously, has implied this view. And yet nowhere else in nature is there such a yawning discontinuity. There are transitional forms between the metals and non-metals, between chemical combinations and mixtures, between animals and plants, between phanerogams and cryptogams, and between mammals and birds. It is only in obedience to the most general, practical demand for a superficial view that we classify, make sharp divisions, pick out a single tune from the continuous melody of nature. But the old conceptions of the mind, like the customs of primitive commerce, become foolish in a new age. From the analogies I have given, the improbability may henceforward be taken for granted of finding in nature a sharp cleavage between all that is masculine on the one side and all that is feminine on the other; or that a living being is so simple in this respect that it can be put wholly on one side or the other of the line. Matters are not so clear."

The proportion of the male to the female principle in the same human being must not be assumed to be a constant quantity. The fact is that every human being varies or oscillates between the maleness and the femaleness of "his" or "her" constitution. "In some cases these oscillations are abnormally large, in other cases so small as to escape observation, but they are always present, and when they are great they may even reveal themselves in the outward aspect of the body. Like the variations in the magnetism of the earth, these sexual oscillations are either regular or irregular. . . . The irregular oscillations . . . may help to explain some curious points in the psychology of a crowd which have not yet received sufficient attention. . . . The conception of sexually intermediate forms makes possible a more accurate description of individual characters in so far as it aids in determining the proportion of male and female in each individual, and of measuring the oscillations to each side of which any individual is capable."

At present, educationally speaking, the sexually intermediate forms of individuals are treated exactly as if they were good examples of the ideal male or female types. From time immemorial there have been only two systems of education: one for those who come into the world designated by one set of characters as males, and another for those who are similarly assumed to be females. "There is wanted an 'orthopedic' treatment of the soul instead of the torture caused by the application of ready-made conventional shapes. The present system stamps out much that is original, uproots much that is truly natural, and distorts much into artificial and unnatural forms. . . . At the present time shoemakers who make shoes to measure deal more rationally with individuals than our teachers and schoolmasters in their application of moral principles."

Weininger traces out, in every conceivable psychologic

and social relation, the bearings of his principles upon the life of man. Upon the relations of the sexes, as in both successful and unsuccessful marriage, these principles throw much light.

There is a type of so-called statesman who is really a political housekeeper, going about his business for all the world like a veritable duenna. Those who were in power at the time of the outbreak of the World War—and for a long time before—were surely a lot of malicious "old women." Those who made the "peace" were of similar if not identical sort.

There is a relationship between such men and courtesans, says Weininger. Each feels the same demand to be in relations with all men, even the humblest. Neither the tribunes of this type nor the courtesan feel that they are marked off from the world; they merge with it, and demand it all as decoration or adornment of their persons. They are incapable of love, affection, or friendship. The politician must sing *in the streets*. He must strut in a booth. He must court the populace. He must be completed by the public. It is the masses that he requires, not real individualities. The politician follows and emulates the courtesan at all points. The politician has to despise his inner life, in order that he may live altogether "in the world," and he must perish, like the things of the world. The courtesan abandons the lasting purpose of her sex, to live in the instincts of the moment. The courtesan and the politician are firebrands causing destruction all around them, leaving death and destruction in their paths, and pass like meteors unconnected with the course of human life, indifferent to its objects, and soon disappearing. The courtesan and the politician may be called the enemies of God; they are both anti-moral phenomena.

\* \* \*

It will be seen that this theory of Weininger's opens up many enlightening leads. Some of them are subtle, as illustrated by the preceding paragraph, while some are obvious. He has certainly treated them in a fascinating, and, at times, tantalizing manner. We should fear to recommend a reading of his book to persons in whom the female element predominates and who are perhaps unduly sensitive, for Weininger is very rough in his treatment of the feminine.

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## Miscellany

CONDUCTED BY ARTHUR C. JACOBSON, M. D.

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### Gulliver's Travels

Were Gulliver to return to earth in this year of grace and continue his travels he would doubtless favor us with some comment on how the spiritually and physically ill in this country are ministered to by an army of freak therapists far vaster than the medical profession itself. Which, we wonder, would he condemn the more—the State or the profession?

As to the legislative measures that we are expected to believe will drive out so many quacks—Gulliver would surely have a good laugh over them. Such an astute observer might also give us a clue as to the dark complexioned gentleman in the woodpile. And we are sure he would have something to say about the intelligence quotient of certain professional groups.

## Public Health

### Ye Towne Gossip

With apologies to K. C. B. and the N. Y. American  
HE WAS just

\*\*\*  
AN ORDINARY looking man

\*\*\*  
WHO SMOKED a cigar

\*\*\*  
AND WORE spectacles

\*\*\*  
AND WHEN I saw him

\*\*\*  
HE WAS signing his name

\*\*\*  
IN THE hotel register

\*\*\*  
BUT WHEN I looked at the register

\*\*\*  
I FOUND that

\*\*\*  
HE WAS a noted doctor

\*\*\*  
AND I wondered why

\*\*\*  
HE WAS in our town

\*\*\*  
THE NEXT day the paper said

\*\*\*  
HE HAD talked to the

\*\*\*  
COUNTY MEDICAL society about

\*\*\*  
TOXIN-ANTITOXIN

\*\*\*  
A FEW days later my

\*\*\*  
LITTLE BOY came home from school

\*\*\*  
WITH A card

\*\*\*  
FOR ME to sign

\*\*\*  
AND WHEN I read it

\*\*\*  
I FOUND it was a request

\*\*\*  
FOR MY family doctor

\*\*\*  
TO GIVE toxin-antitoxin

\*\*\*  
TO MY boy

\*\*\*  
TO PREVENT his getting diphtheria

\*\*\*  
AND YOU can bet

\*\*\*  
I SIGNED it

\*\*\*  
AND NOW he is protected

\*\*\*  
AND SO are his little brother

\*\*\*  
AND BABY sister

\*\*\*  
I THANK you. (*Health News*)

### Survey of Defective Eyesight

Defective eyesight is affecting the country's industrial output, is handicapping education, and is a growing menace to human welfare, it is asserted by the Eye Sight Conservation Council of America in a comprehensive eyesight survey of two years' duration covering the entire field of eyesight conservation. The deleterious influence of eye defects and eye diseases, it is declared, is a challenge to civilized effort in social control.

Masing all existing data, and supplementing it with the results of original research, the Council finds that defective vision is widespread among industrial workers and school children, and that it is a prolific source of waste in both industry and education.

Summarizing condition in education, the report, called the most comprehensive of its kind ever completed in this country, says that 25 per cent of the school children in the public schools of the United States "have manifest defect of vision and symptoms

of eyestrain." This result was reached through simple visual acuity tests.

The survey, it is stated, covers eye tests of more than 14,200,000 school children and students enrolled in public schools, state normal schools, universities and colleges.

"Reports of State Departments of Education and State Boards of Health since 1907 furnished data covering 9,023,000 eye examinations of public school children," said the report explaining the basis upon which it concludes that a situation justifying alarm exists.

"Various municipal and rural reports since 1907 cover 4,300,000 examinations in public schools; while the most recent statistics have been furnished directly in reply to inquiries sent to public school authorities of 247 of the largest cities in the country, to the 300 state normal schools and teachers' colleges, and to the 750 colleges and universities in the United States."

The survey of 247 city schools provided statistics of the results of testing the eyes of 863,936 children. Of this number, one group of 483,154 shows, according to the report, that 21.9 per cent had defective vision. A similar conclusion, it is said, was reached by the Federal authorities.

Defective vision is increasing among older students, the survey in colleges and normal schools indicates. In sixteen state normal schools and twenty-three colleges and universities having a total enrollment of approximately 100,000 students, 54,695 tests were made, showing that 18,706 or 40 per cent had defective vision.

Two-thirds of those reporting found defective vision within the range of from 35 to 50 per cent. "It is safe to assume," says the report, "that this prevalence of defective vision among these students at the beginning of their university studies was undoubtedly higher than prevailed with these same students in their earlier years."

Poor eyes, it is declared, induce retardation and are responsible in some measure for the backward student. "The proportion of retardation found among four groups of school children with defective vision, totalling 28,667," the report continues, "varies from 60 to 85 per cent and averages 67 per cent. The prevalence of defective vision, found among six groups of pupils retarded in their progress, varies from 12 per cent to 81 per cent."

Eyesight, as an important factor affecting the output of the industries of the United States, is being overlooked, the report asserts. A survey was made to determine the prevalence of visual defects among industrial workers and the methods practised by industrial concerns for examining the eyes of their employees.

Information was furnished by 170 companies located in 23 states and employing over 1,000,000 persons. The data furnished by 40 companies was complete enough for adequate summary and comparison.

"The records of these 40 companies," the report adds, "cover the examinations of the eyes of 204,817 employees. The kinds of tests used vary from the very simplest to thorough eye examinations."

"Even though the prevalence of defective vision was reported by one company as low as 5.3 per cent, which is no indication of the true condition, the average proportion of defective vision as reported by the 40 companies was 44.3 per cent."

"The records from 20 companies of 150,782 eye examinations, or 77 per cent of the 204,817 examinations reported showed the prevalence of defective vision ranging from 48.3 per cent to 79.2 per cent and averaging 54 per cent."

"This group of 200,000 industrial eye examinations is many times larger than any group that has previously been studied for the purpose of arriving at definite conclusions."

"It is considered sufficiently large and properly distributed both geographically and according to the type of industry to establish an accurate incidence of the proportion of defective vision among the 42,000,000 gainfully employed persons in the United States."

Sections of the report, compiled by Joshua Eyre Hannum, research engineer of the Eye Sight Conservation Council of America, and edited by Guy A. Henry, the Council's general director, deal with eye hygiene, eye diseases, eye defects, eyesight and education, eyesight and occupation, eye protection, and illumination of school and home.

One section tells of the struggles with poor eyesight of noted persons, including Francis Parkman, Tschaiakowsky, George Eliot, William Wordsworth, Theodore Roosevelt, Goethe, Margaret Fuller, Jonathan Swift, John Greenleaf Whittier, H. G. Wells, Honore de Balzac, Adelaide Ristori, Basil King, Taine, and Nietzsche. Whittier, it is said, was color blind, and Taine was cross-eyed. Relentless use of the eyes, according to the report, hastened the death of Balzac.

### Should the Schick Test Be Abandoned?

W. H. Kellogg of California State Board of Health reaches these conclusions:

1. Observations show that the Schick test is subject to errors in its application, which more than offset the value of the information derived from its use. The causes of the errors are:

a. Unavoidable error in technique of the injection, possibly also including variation of skin reactivity in different areas.

b. Unavoidable errors in the interpretation of pseudo reactions.

c. Deterioration of toxin against which there is no control when a few tests only are being made.

d. Lack of sufficient experience in the use of the test which multiplies all possible sources of error.

2. A high percentage of false negative Schick tests has been found in persons following immunization, the information as to their true status having been determined by laboratory test using the Kellogg method.

3. The Schick test is of academic interest only and should be abandoned completely for the following reasons:

a. It is subject to a sufficient percentage of false negative readings to result in the failure of protection of children who otherwise would have been protected.

b. Knowledge of the immune status of children is not required, as most of those in the age group most concerned are susceptible, while immunization of the balance is open to no objection.

c. General immunization of children without further attention to whether or not immunity has been attained, will result in complete public health control of diphtheria.

4. For determining the immune status of individuals and small groups, where this information is specially desired, the laboratory test of the author is convenient and accurate.—(*Am. J. Pub. Health*, Oct., 1925.)

### A Family of Typhoid Carriers

Anna D. Dulaney of the University of Missouri, says that during the first week of July, 1925, 10 cases of typhoid were reported to the health officer of Columbia, Missouri. All of the individuals affected were found to be patrons of a small dairy, owned by the S. family which consisted of a father, mother, young daughter, a married son and his wife.

The father gave a history of typhoid 26 years ago; the mother's infection dated back 16 years; and the daughter-in-law had recovered from a severe form of the disease only 10 months ago.

This was the second venture of the S. family in the dairy business. 10 years ago they had opened a dairy which they were forced to close two years later because of an outbreak of typhoid, the source of which was found to be the milk from their dairy.

In January, 1924, the family moved across town, reopened the dairy under a trade name, and until July, 1925, all went well. As before, the father milked the cows and the mother prepared the milk for distribution. No other members of the family assisted in caring for the milk.

On June 1 the dairy was sold to an old man who engaged the son, E., and his wife, R., to operate it for him. On this date E. and R. assumed charge, E. milking the cows and pooling the milk in a wide open mouthed container, and R. bottling the milk and capping the bottles.

Specimens of urine and feces were obtained from the adult members of the family. Endo plates from the specimen of feces from R. gave typhoid-like colonies giving very slight agglutination with antityphoid serum. Subsequent transplants from these colonies gave definite agglutination with known antityphoid serum and with the serums of infected individuals. A second specimen of feces also typhoid organisms. The sanitary picture would serve nicely in any text on hygiene. An outdoor toilet was located about 30 feet from the milk house and about 50 feet from the cistern, formerly used for drinking purposes, and was above the level of the well. City water was used for washing the milk vessels, but was carried to the milk house through a hose that lay on the ground and led from a hydrant behind the toilet.

E. and R. had only been married a year and R. had spent only 2 weeks in the S. home during August, 1924. Three weeks later, she developed typhoid. By exclusion it is reasonably certain that her infection took place during the 2 weeks spent at the S. home. Three weeks after she began to handle the milk in June, 1925, cases of typhoid appeared and the final count involved 22 patrons of the dairy who were infected. All recovered.

The father has apparently been a carrier for 26 years. He was responsible for an epidemic 8 years ago, and undoubtedly responsible for his daughter-in-law's infection 10 months ago. The location of the toilet in respect to the cistern from which the family drank water last summer could account for her infection, or it could have been transmitted in other ways.—(*Am. J. Pub. Health*, Oct., 1925.)

### The Prevention of Blindness

Pennsylvania has commenced an unusual experiment in the promotion of health education—the experiment of a totally blind man spreading the gospel of the prevention of blindness and the training, care and employment of the blind.

The central figure in this experiment is Hon. Henry E. Lanius, who for 14 years has been a member of the State Legislature of Pennsylvania, and a nationally known Chautauqua speaker. In accordance with a campaign planned at a joint conference of the Lions Clubs of Pennsylvania, the Pennsylvania Association for the Blind, the Pennsylvania State Council for the Blind and the National Committee for the Prevention of Blindness, Senator Lanius will spend the next year crossing and crisscrossing Pennsylvania, conducting in each of the 53 cities in which there is a Lions Club an intensive one week campaign with the two-fold purpose, first, of acquainting the community with the principal causes of blindness and the means of eliminating or counteracting such causes, and second, bringing to the community a better appreciation of the existing opportunities for training the blind and the near blind to become self supporting, happy and constructive citizens.

This unusual campaign is being financed by the Lions Clubs and is being directed by the Pennsylvania Association for the Blind, of which H. R. Latimer, also totally blind, is Executive Secretary. On the invitation of the Pennsylvania Association, the National Committee for the Prevention of Blindness will cooperate by distributing in each community visited by Senator Lanius information concerning the prevention of blindness and conservation of vision developed as the result of 11 years of research under the direction of the country's best known ophthalmologists.

The purpose of Senator Lanius' campaign is primarily to reach the adult population of Pennsylvania, for the education of the young blind is now on a sound basis in Pennsylvania, being provided for by the Department of Public Instruction. Discussing this unusual experiment, Senator Lanius said:

"One of the proofs that the world is getting better is the increasing interest being taken by clubs and organizations, originally designed for social relaxation, in bettering the condition of the poor and destitute.

"The latest expression of this tendency is that of the Lions, International, one of the younger of the luncheon organizations, which has thrown its hat into the ring, adopting as its major activity, the welfare of the blind throughout the nation. The roar of the Lion will now mean hope and cheer to those handicapped citizens.

"Blind lawyers, doctors, ministers, typists, factory workers, weavers, etc., are not the result of genius or accident, but are made through giving careful consideration to each blind person's capabilities and seeing that he gets the proper training to develop them. This the Lions have learned through investigation and this conviction they are determined shall be brought home to the people of the nation.

"In Pennsylvania, the Lions Clubs have joined with the Pennsylvania Association for the Blind in an effort to show the people that the blind can be made self-supporting and useful members of their various communities if given proper opportunities."

### Sanitarians Condemn Drinking Glass

With laws against the common drinking cup written in the statutes of forty-six of the forty-eight States of the country and with local regulations against this spreader of contagious disease as part of the Sanitary Code of many cities and towns, there has been evident in the past year a general tendency to strengthen these laws and regulations so that the common drinking glass will be abolished entirely at public drinking places.

This new protection for public health is the result of the most vigorous combined campaign that has been instituted since the original agitation against the common cup in 1910. It has been found by those who have investigated conditions that prevail in soda fountains, hotels, restaurants, theatres, motor camps, picnic grounds and other public places that the only measure of absolute safety is to compel the use of sanitary paper cups that are destroyed after a single service.

These investigations were conducted in concert by Federal, State and municipal authorities, working in co-operation with civic health groups and women's clubs. Their united activities produced the greatest benefit that any other year in the last fifteen has witnessed. The activities against the common cup or drinking glass are believed to be responsible in a great measure for the year's reduction in the rates of illness and death. The gradual elimination of what the United States Public Health Service calls a "germ exchange" has reacted favorably for national health.

Surgeon General Hugh S. Cumming, of the Public Health Service, inaugurated the campaign in the most striking manner. In a lecture broadcast over the radio from forty-six stations in the United States and Canada the millions who listened in were in-



formed that the common cup is an agent for the transmission of tuberculosis, pneumonia, influenza, diphtheria, scarlet fever, measles, whooping cough, cerebro-spinal meningitis, poliomyelitis (better known as infantile paralysis), smallpox, chickenpox, mumps, German measles, septic sore throat, and the common colds.

Following upon this, similar warnings were conveyed through radio by health officials of New York, New Mexico and Maryland. Official bulletins urging greater vigilance against this disease menace were issued by Delaware, Oklahoma, Tennessee, California, Indiana, Maine and South Carolina.

In two States, Rhode Island and Indiana, legislation was sought to take the common glass entirely out of soda fountains and other places. Louisiana wrote new amendments into its Sanitary Code which provided that sterilized vessels, or paper cups were to be used in places to which the public has access. Arizona was added to the States which have adopted the Railroad Code that prohibits all but paper cups on common carriers.

Various cities and towns throughout the United States wrote into their municipal regulations new provisions for thorough sterilization of drinking vessels or the use of paper cups. These include Durham, Goldsboro, Elizabethtown and Wilmington in North Carolina; Savannah, Ga., and Asbury Park, Summit and Madison in New Jersey. Other towns are planning to follow this example when the summer months return.

In Dayton, Ohio; New Britain and New Haven, Conn., and Albuquerque, N. M., the city health officers introduced a system of ratings to establish for the public's information the sanitary conditions prevailing in soda fountains—or restaurants.

Various local crusades under the leadership of city health officers were instituted in many cities and towns among which are: Oakland, Los Angeles and San Jose in California; Pueblo, Colo.; Tampa, Fla.; Augusta, Ga.; Chicago and Bloomington, Ill.; Topeka, Kan.; Jackson, Miss.; Joplin, Mo.; New York City, Hudson, Middletown, Binghamton and Auburn, N. Y.; Trenton, N. J.; Charlotte and Winston-Salem, N. C.; Columbus and Wilmington, Ohio; Joseph, Ore.; Altoona, Pa.; Greenville and Florence, S. C.; El Paso and Dallas, Tex.; Covington, Va., and Seattle and Walla Walla, Wash.

Adding their influence and authority to the movement for safer drinking conditions—with a consequent lessening of the danger of contracting contagious diseases—were Dr. Henry F. Vaughan, until recently President of the American Public Health Association; Senator Royal S. Copeland, of New York; Dr. Frank J. Monaghan, Health Commissioner in New York City; Dr. Herman Bundesen, Commissioner in Chicago, and many other nationally-known sanitarians.

In assistance to the health authorities in enforcement of the laws and compulsion of the use of paper cups, where thorough sterilization of drinking vessels is impossible, were many women's organizations, among them the Parent-Teachers' Association, the Association of American Teachers of Diseases of Children and like groups of country-wide strength.

Local women's clubs did valiant service in the protection of the children who patronize soda fountains and like places. In the Bronx, in New York City, a group conducted a personal survey of conditions and in many instances forced the owners or managers to make their facilities germ proof through the sterility of the receptacles or the use of paper cups. Like action was taken in Cleveland. Other cities have reported that women's clubs have been helpful not only in cleaning up places that harbored perils to community health, but also in producing more stringent local ordinances.

An instance in which the women of a community impress their force for health is given in the following resolution recently adopted by the Woman's Civic Club of Roselle, N. J.:

"Whereas, The common cup is a prolific source of many diseases; and,

"Whereas, Observation has shown that classes of soda fountains and other public drinking places are not properly cleansed;

"Resolved, That the Woman's Club of Roselle indorse all legislation making it mandatory for all soda fountains and other public places using drinking glasses to change to the sanitary paper cup."

Recognition of the dangers in these public drinking vessels brought into alliance with the movement hundreds of insurance companies, public health organizations generally, and managers of motor camps and State and county fairs.

With the sickness and death rates falling before such a vigorous onslaught against one of the major agents in transmission of dangerous diseases, sanitarians, health officials and civic bodies are planning for an even more aggressive warfare for the present year.

#### Nudity and Health

British physicians have made an important discovery. They have announced to the public that long trousers and linen collars are a menace to the survival of the male sex. They report that the health of women is superior to that of men because

they expose their throats and wear short skirts and sleeveless waists. And they attribute this superior health to the beneficial action of the ultra-violet rays of the sun acting on the bared skin. So convinced are they of the importance of this discovery that they have submitted a resolution to Parliament urging a law compelling men to wear knee-breeches and collarless shirts.

The theory is an interesting one, but it belongs to the same class as the discovery made by an aged scientist in the sixteenth century and submitted to a group of savants for explanation. This scientist, at a meeting of his colleagues, submitted this question: "Why is it that a bowl of water with a fish in it does not weigh less when the fish has been removed?" The savant gathering pondered long over the difficult question, one finally offering the explanation that, as a fish displaces its own weight in water, the removal of the fish would make no difference in the weight. This explanation was about to be agreed upon as satisfactory, when a youthful scientist, with the impudence of his age, said: "Why not try the experiment and see if it is so?" The experiment was tried and it was not so. When the fish was removed the bowl of water weighed less.

The theory of the British physicians is an interesting one, but it might cause them considerable embarrassment if some health statistics were asked in support of their contention. Women have been exposing themselves for centuries and man has been covering his extremities for almost as long, but there seems to be little evidence that man is growing feebler and woman stronger. Perhaps one should say that women are not growing more robust, for they certainly have grown stronger, more determined, more wilful, and more domineering. If the British theory had been that exposure to the ultra-violet rays has produced more strong-minded and independent women, their would be no quarrel with their finding, but as they base their contention on the consideration of health, they are treading on questionable ground. In the days when men wore knee-breeches, they were not more virile or robust than they are now. On the contrary, they tended toward effeminacy.

It is true that, during the same period, when women wore long trains and did not expose even the tips of their boots, they were not nearly as sturdy as they are now. But the difference is not due so much to clothes as to a changing habit. In that period it was unseemingly for women to be anything but delicate and retiring, and athletics were taboo. The shortening of women's skirts has encouraged them to walk more and indulge more in outdoor activities, practices which have done more for building them up than ultra-violet rays. If man adopted long trousers, it was chiefly in self-defense, as few men are so endowed as to appear at their best in knee-breeches.

Similarly, collars are worn by men for esthetic reasons, just as women bare their throats for esthetic reasons. And now that women exercise and have developed shapely limbs as a consequence, it is natural that they should shorten their skirts and abandon their sleeves. Furthermore, they are conforming more strictly with the methods of nature. And men, rather than expose their least attractive areas, will prefer to risk an early death.—(Am. Med.)

#### Conference on Food Habits

A Conference of Food Habits was recently held in Washington under the auspices of the Bureau of Home Economics of the Department of Agriculture. Dr. Louise Stanley presided and twenty-five scientists, known for their research in the field of food production, nutrition, medicine, and public health attended the meeting.

Secretary Jardine sent the following message of endorsement to the conference:

"I wish to take this means of expressing my interest in this conference on food habits and my feeling of the importance of such a conference at the present time. The department is particularly happy to further such a conference in view of its interest in the various aspects of this subject. The department not only has the responsibility of aiding in the efficient production and distribution of food, but the Bureau of Home Economics has been established with the avowed aim of assisting in the wise utilization of agricultural products.

"Interest in dietary studies is no new thing for the Department of Agriculture. In fact, I believe that the department was the first organization in this country to start such work some thirty years ago under the direction of Dr. W. O. Atwater in cooperation with the State experiment stations and the United States Labor Commission. Doctor Atwater saw that in order to make practical application of the laboratory research on nutrition it was necessary to know what the American people were eating. Doctor Atwater also compiled the tables of food composition, chiefly from data furnished by the State experiment stations, which have been used in analyzing practically all dietary studies made in this country.

"It is opportune that such a conference should be called now because the recent enactment of the Purnell Bill has made avail-

able to the States, funds for nutrition work. The department is cooperating very closely with the States in these studies and it is important that in planning them we should stop and take stock of our present knowledge. We should think through very carefully the information which is needed in regard to the American diet in order to furnish the greatest help to all concerned, and we need to work out a method of collecting the information.

"The department in all its work is aiming to apply scientific findings to every-day problems. There is no problem facing the American people more important than the provision of proper food three times a day. There is much that nutrition can contribute to the practical phases of diet. But in order to do this we must know present food habits. It is my hope that through this conference a very definite program may be developed for study of food habits. The program of the Bureau of Home Economics will be guided by such recommendations. Any such program should be so developed as to cover the various phases of the subject and give us the information we are needing to guide production and distribution, to offer advice to the producer as to what the consumer wants and why, and at the same time show to the consumers how their diets may be bettered from the point of view of health and efficiency."

#### Their Eyes a Handicap

Three million school children in the United States, or one-eighth of the entire school population, are handicapped in their education by defective eyesight, according to a report sent by the National Committee for the Prevention of Blindness to every city, state and county school superintendent in the country, urging that a uniform law for the examination of the eyes of school children be adopted by all states and cities.

The report which is entitled, "Conserving the Sight of School Children," is the result of more than a year's exhaustive study made by a Joint Committee of the National Education Association and the American Medical Association with the cooperation of the National Committee for the Prevention of Blindness. This study was conducted under the direction of Dr. Thomas D. Wood of Columbia University, New York, Chairman of the Joint Committee.

According to the report only 17 states make the examination of the eyes of school children compulsory by law, and few of these state specifically the portion of school population to be examined, the frequency with which such examinations should be made, or whether the examinations shall be made by physicians, nurses or teachers. In 14 other states the law is merely permissive.

To secure accurate information providing a basis for recommendations to school officials of desirable administrative procedures, the Joint Committee made a questionnaire study of actual practices followed in public schools in caring for the eyesight needs of school children. The study covered 375 cities, also rural districts in every state and was carried out with the assistance of school authorities and health officials in all these communities as well as by 100 of the most noted ophthalmologists in the country.

Figures yielded by the Joint Committee's study show that only one-half of the 24,000,000 school children in the United States have their eyes examined and vision tested while attending school, and that of the children attending the public schools, about 12 per cent have defects of vision which constitute educational handicaps. This estimate, the report states, "suggests that considerable progress in eyesight conservation has been made in schools since previous studies, and this progress has resulted in decreased percentages of eye defects." The estimates of recent years which have been considered most reliable range from 15 to 30 per cent.

An interesting fact brought out by the Joint Committee's report is that the rural districts generally report a larger percentage of defective vision than the city districts. In Pennsylvania the rural districts showed 16.8 per cent of defective vision of more than 500,000 pupils examined, while among 370,000 pupils examined in the cities the percentage of defective vision was only 8.5. Only 6.3 per cent defective vision was reported in Iowa urban districts as compared with 14.4 per cent defective vision in Iowa rural districts. "The explanation of this difference cannot positively be made," the report claims, "but it seems likely that it is due to such differing factors as conditions under which the test results were obtained, bad illumination in rural homes and school, and the small number of corrections provided for rural children."

Besides serving as a summary of the extent of defective vision among school children and present practices in conserving the eyesight of the growing child, the Joint Committee's report give information essential for the teacher, the school nurse and the school physician in the conservation of vision and enumerates the duties of teachers, nurses and other trained non-medical examiners in caring for the eyes of the child.

"Even when the most effective service is rendered for conserving the sight of school children, declared Lewis H. Carris, Managing Director of the National Committee for the Prevention of Blindness, in discussing the report, "there will still be a small

minority, approximately one in every 500 of the school population, who, because of seriously defective vision, cannot be educated profitably in the regular grade." For these children, special conservation of vision classes are urged. These special classes would not only help handicapped children, by giving them educational advantages while saving their sight. It would also help normally sighted children by relieving the teacher of the necessity of devoting a disproportionate amount of time to handicapped children.

Advocating administrative measures for conserving eyesight of school children "which will enlist most effectively the agencies in the community qualified to co-operate in the needed program," the report of the Joint Committee on Health Problems in Education concludes:

"Conserving the sight of school children is fundamentally a duty of the school. The task of conserving the eyesight of children, those with normal eyes and those with defective eyes, requires the intelligent sympathetic co-operation of school authorities, health authorities, physicians, parents of the children themselves and in many situations of other agencies in the community."

#### Curing the Child Who Steals

Only by studying the motives of the child who steals can we understand and intelligently treat the individual. Many children, for instance, steal as a means to a given end. Find out the end and treatment will suggest itself. A boy of 9 years, from an excellent family of culture and education, suddenly began to steal money from other members of the family, using it to purchase candy and other delicacies which he distributed among his boy companions. In this particular case, the boy's intellectual, social, and athletic activities were very much overshadowed by those of a superior and rather arrogant brother, who was constantly humiliating him. In athletics especially the boy was not so efficient as most boys of his age, and for this reason he was cut off, more or less, from his companions. He did find, however, that his popularity could be established, in a measure at least, by supplying the boys with gum and candy and treating them generously. In order to do this he resorted to thefts.

A temporary separation of the boy from his older brother by a summer at camp, explaining the underlying motives for his difficulty and laying special stress on the development of his physical life, proved to be a satisfactory solution of the problem.

Another case of his kind was that of a rather undernourished poorly developed, anemic-looking lad, 7 years of age, with a rather superior intellectual equipment, who about a year ago committed his first, and what fortunately proved to be his only, theft.

It so happen that his mother, a hard-working, conscientious woman whose husband had died a few years previously, was making a heroic struggle to keep together a family consisting of the patient and his two sisters, one older and one younger than he. It seemed a bit more than the mother's limited finances would permit to allow Frederick to have 20 cents a week with which to buy milk at school. The boy not only needed and wanted the milk, but he was deeply humiliated when, at the recess period, all the other boys except him and two others left the classroom to get their milk.

This was the situation which tempted him to plan to steal \$5 from his mother's pocketbook. He had the bill changed and gave the two other boys who were in the same situation 20 cents each to buy their milk, keeping the same amount himself and secreting the rest of the money in the bathroom at home. His presence in the group buying milk was noticed by the teacher, who reported it to the mother. Meanwhile, the mother discovered her loss. Upon being questioned, Frederick immediately admitted the theft and returned \$4.40 to his mother. He appreciated fully the nonsocial nature of his act and the consequences which might follow if this type of conduct became a habit.

Except for making arrangements where the boy might receive milk regularly at school, as his poor physical condition demanded, and allaying the worry and anxiety of an overwrought mother, nothing in the way of treatment was instituted. Although eight months have already passed no further difficulties have been reported.—Publication No. 143, of the Children's Bureau of the U. S. Department of Labor.

#### Laboratory Tests on Typhoid Convalescents Important

A health officer in the central part of New York State reported recently that he had discovered a typhoid carrier by obtaining fecal specimens from a man who had the disease last July, but whose stools have continued positive ever since.

If this procedure were followed in every case of typhoid fever, many carriers could be discovered sufficiently early to prevent them from spreading the disease, thus complying with the old adage which has to do with failing to lock an equine shelter until after the steed is purloined.—(Health News)



### Eat It or Leave It, Good Policy with Finicky Children

"Eat it or leave it, as you wish," said the mother to her choosy child. "There'll be nothing else until breakfast to-morrow morning, you know."

She may have thought of him as a finicky child; she may even have blamed herself for having "spoiled" him. However, she explained his food refusal to herself, she was a wise mother to set out at once to break it up. The child who is allowed to leave his food on his plate a few times soon knows he has the upper hand. In addition to being naughty at the table, he asserts his right to rule whenever there is a difference between his desire and that of his parents. More than that, one wholesome food after another is left off, and in time he begins to show evidences of a malnourished condition because he is choosing and getting too many sweets and too few vegetables, fruits, eggs and but little milk. It is because of this relation between food finickiness and malnutrition that the Bureau of Home Economics, United States Department of Agriculture, is making suggestions for solving these feeding difficulties as a contribution toward the observance of Child Health Week, May 1 to 8.

Every child feeding problem can be solved by one method or another if adults have sufficient patience, understanding, and ingenuity. For instance, the mother who let her child go to bed without any dinner because he refused what his plate contained was acting in agreement with the policy of many child specialists. No healthy child will starve or become malnourished because he is allowed to go hungry for a meal or so.

In fact, if missing one meal has not shown him that his parents are in earnest, he may well be required to miss several more. This method is effective only if there is no food given him by neighbors or others who do not know he is being disciplined. The mother who resorts to this let-him-go-hungry system must be very sure she has been offering the right food and that it has been well prepared. She is then justified in placing her judgment so sternly over that of the child's preference. Also, she will be both kind and wise if she offers his food with no comment on the past unpleasant experience; it never helps for the victor to "rub it in."

Sometimes "starving" will not work because the child is indifferent to food. Then there is something else for the parents to be concerned about. Active, healthy little tots have every reason to be hungry at mealtime and can well be expected to greet their food with joy. Lack of appetite may be due to over-fatigue or some other bad physical condition, or to not enough active play out of doors. Sometimes the explanation is even simpler: nibbling between meals. Even the child who does not have nickels for ice cream cones or candy bars at odd times may be taking the edge off his appetite by eating wholesome food at a time when his stomach should be resting. Some children may need an extra lunch, but if so food should be given at a regular time rather than as a "piece."

If parents would only realize that all of this eating business is so much a matter of habit, they would see to it that only the right habits have a chance to start. By the time the baby is weaned he should have become acquainted with such a wide variety of fruit, vegetable, and cereal flavors that adding new ones occasionally would be no trick at all. The trouble is that mothers often are discouraged early in the game when the baby spits out first tastes, and perhaps makes grimaces. This is a perfectly normal response to the new food, simply because it is new. Older children, too, and even adults, often have to become accustomed to something they have not tasted before. It feels strange on the tongue; it may be warmer, colder, or coarser than the accustomed food; it is *different* but that does not make it distasteful. *Distaste* or dislike usually comes under the influence of bad example or unfavorable suggestion. Often a child is unintentionally encouraged into a dislike by the mother who is prejudiced against the spinach that she is feeding him. Her aversion is strong enough to carry over to the baby though he is still too young to be aware of what is happening. The slightly older child, proud to be just like daddy, imitates the bad example of his elder and mimics his father's dislikes.

Of course, some food prejudices begin in other ways. The food may have been offered, when the child was ill, angry, frightened, or otherwise emotionally upset. Perhaps he has unconsciously linked in his mind the flavor of some distasteful medicine with that of the food he is refusing. It is very helpful to trace out these associations of ideas and experiences wherever possible, because it is easier for parents to undo a bad habit when they understand how it began.

Parents who have finicky children might well begin by turning an eagle eye on their own food habits to see if they are, themselves, setting a good example. It might not be amiss to record table conversation verbatim and to note to what extent food matters, both as to choice and condition of food, are discussed before the children. After directing such an investigation toward themselves, parents should study their children's food habits and temperaments and then refer to the abundance of recent literature on child training which gives concrete suggestions for solving all types of behavior problems.

## Diagnosis and Treatment

### Experimental High Intestinal Obstruction Relief by Irrigation and Control of Alkalosis

The operative and irrigation procedures reported on by M. M. Portis and Bernard Portis, Chicago, were performed on dogs. One tube was passed up to the closed end of the proximal duodenal loop and a second tube was kept in the same loop near the gastro-enterostomy opening. Physiologic sodium chlorid solution or Ringer's solution was introduced through the longer tube at a slow constant rate from an elevated bottle. The fluid was withdrawn by gentle suction from a water pump. A third tube was left in the stomach itself in order to wash out excessive gastric secretion, and also for the early introduction of fluids and later food in the stomach. This type of irrigation was tried in three series of dogs.

First, with an ordinary gastro-enterostomy; second, with a gastro-enterostomy and a pyloric occlusion, and third and most important, in a series of dogs prepared according to the second method, but with a rubber band placed on the proximal loop near the gastro-enterostomy opening. In this manner a positive obstruction was produced with the duodenum forming a closed loop. This irrigation was carried on continuously for twenty-four hours and also for a short time after the occlusion had been removed. At the end of twenty-four hours, a linear incision was made under local anesthesia to the left of the midline. The rubber band occluding the jejunum was removed and the abdomen closed. The animal received further duodenal irrigation for a period of four hours and then was permitted to rest. The authors assert that such irrigation of the obstructed duodenojejunal loop has a favorable action, and when accompanied by control of alkalosis relieves the symptoms and prevents death. (*Journal A. M. A.*)

### The Value of the Cystoscope

In considering the use of the cystoscope and its value, A. Mates of New Orleans, includes any instrument which enters the urinary bladder, carrying its own illumination, in the form of an electric bulb—as the Brown Burger instrument—and those using a reflector or headlight—as employed in the less commonly used direct cystoscope, of which that bearing the name of Kelly is an example.

### Difficult Diagnoses

Conditions of the prostatic urethra, such as impacted or residual calculus; cysts of the colliculus; papillomatous or simple hypertrophies of the vesical neck, in the form of flat or stellate projections, can be determined only by cystoscopic examination or the use of the posterior urethroscope. The existence of the unusual vesicoprostatic fistula can be proved only in this manner. Cystitis *per se* (not an infection of the upper urinary tract) is easily diagnosed, but the persistent case demands cystoscopy to definitely exclude the kidneys.

Cystoscopy offers a differential and final diagnosis in all infections of the urinary tract. It is the only maneuver known for the localization of infection of one or both kidneys, bladder or prostate and vesicles. The presence of calculi, tumors (both the flat carcinomatous and the papillomatous, simple and malignant) is determined by inspection of the bladder. The condition of the trigone; the degree of inflammatory reaction; the presence of any diverticuli or interureteric bar, or any enlargement of the postate or carcinoma of that organ and its localization are determined in as casual a manner as one would inspect the mouth and note the findings present. Ulcers, if present, are noted as to their number, position and character. Hematurias are easily localized by the use of the cystoscope, excluding conditions of the penile urethra, prostate and posterior urethra that are self evident. If caused by a calculus, its presence and the absence of blood in urethral catheterization clears the upper tract of any involvement in the process.

### Ureteral Conditions

There is no more interesting picture than to see a ureteral orifice spouting blood. Ureteral catheterization is here used merely to collect specimens and to determine the degree of functioning of the respective kidneys.

Anomalies of the ureters, reduplications absence and various types of orifices are noted in ureteral catheterization and ureterography (x-ray examination).

The presence of calculi kinks, angulations and strictures of the ureter are determined by cystoscopy, plus ureteral manipu-



ulations with various types of catheters and bougies and by ureterography, with and without the use of an opaque medium such as sodium bromide, 25 percent, or sodium iodide, 10 to 20 percent.

Ureteral catheter drainage, via the cystoscope, gives us a differential kidney specimen for chemical, microscopical and biological examination and comparison with that from the opposite side.

The use of dyes, such as phenolsulphonphthalein and indigo-carmin, injected intravenously or subcutaneously, and noting their time of appearance in the urine and percentage excretion, over measured periods of time, is of further value to complete a diagnosis.

The capacity and anomalies of the kidney pelvis and the presence of inflammatory changes, calculi and tumors are determined by ureteral catheterization and by pyelography, with and without the use of opaque media.

The condition of the kidney proper—its functional capacity, the size, shape and the existence of calculi, can thus be readily determined. Pyonephrosis and tuberculous, pyogenic or other chronic inflammatory process can also be thus ascertained; and the size, location and nature of a tumor can, with rare exceptions, be determined.

It will thus be seen that scientific urology, including a consideration of the cause of any condition of the upper urinary tract, ureters, bladder and prostate, demands the use of a cystoscopic instrument, either for diagnosis or for localization of the signs or symptoms presenting. No claim is made for the superiority of any particular cystoscope, nor are any conditions of the urinary tract with their symptomatology enumerated.

In considering the use of various operative maneuvers, such as the obtaining of specimens by the use of forceps; the implantation of radium and radium emanation; the treatment of ureteral calculi and anomalies of the ureter; bladder fulguration; catheter drainage and lavage with various medicaments, the cystoscope is the instrument necessarily employed.

In conclusion, it is suggested that the cystoscope be more generally and liberally employed in the diagnosis of urological cases. More cases will thus come to the operating table with a correct diagnosis, properly timed for operation, and not in the haphazard manner of the past, where kidneys were needlessly sacrificed and where many patients were doomed to invalidism (as an unilateral kidney lesions, or where a solitary kidney was removed or a fused kidney sacrificed) because we were not sure of the function or status of the other kidney; cystoscopy being either unknown or the surgeon having failed to employ it in diagnosis, through ignorance, carelessness or neglect.—(*Clin. Med.*, Sept., 1925.)

#### Tonsillectomy in Rural Practice

L. A. Hulbert, of Springfield, N. Y., gives a review of one hundred consecutive tonsil operations taken from rural practice, covering a period of two years. It includes both children and adults, varying in age from two and one half years to fifty-four years. The children, sixty-six in number, were operated upon under general ether anesthesia; the adults, thirty-four in number, under local anesthesia. An arbitrary age of fifteen years was taken as the dividing line between children and adults. All operations were performed outside of a hospital and with the assistance of only one other person. Not one case terminated fatally. All were without complications except one, in a child, in which pleurisy developed on the third day following general anesthesia, lasting one week and terminating in complete recovery.

All cases were of the chronic hypertrophic type, both the fibrous and lymphoid variety. Many of the tonsils were enormously enlarged, touching in the midline, cryptic, and filled with a cheesy material; others so necrotic that only a shell remained. Some were situated very superficially, others deeply imbedded. The first group, when removed, left a shallow fossa, the latter, large well defined pillars. Those cases giving a long history of repeated attacks of tonsillitis presented a very fibrous tonsil, firmly adherent to the anterior and posterior pillars offering difficulty in dissection. Adenoid hypertrophy in the nasopharynx was found in the majority of the cases in children. Some were re-operative cases, the tonsil having first been removed when the patient was a child, the recurring tonsil becoming diseased and causing symptoms in a similar manner to the original tonsil.

Careful histories were taken of the cases, with special reference to any pathological condition in the chest and any tendency to abnormal bleeding. This was checked up with physical examination and coagulation time, using the simple glass slide method. A coagulation time of over ten minutes was considered abnormal. Existing colds, bronchitis, and other disorders of the respiratory organs, were treated for a short period, if necessary. Care was taken not to operate in a case during any phase of the acute stage of an attack of tonsillitis.

In sixty per cent of the cases the patients gave as their chief complaint frequent attacks of tonsillitis, sore throat, and quinsy, varying in duration from a few days to eight weeks. In the children this symptom was associated with mouth breathing, restlessness at night, and a "general run down condition." In this group, especially among the children, frequent winter and spring colds were common, complicated by middle ear infection. This tendency was more marked in those patients having an abundance of adenoid tissue. Eight and two-tenths per cent of the patients gave colds as their chief complaint; 3.5 per cent of the adults complained of rheumatism, and one patient complained of "localized neuritis." Nine per cent complained of tiredness and a lack of usual vigor. Chorea existed in one child.

The children were given general ether anesthesia, administered by a nurse assistant, and continued by a Sorensen pressure suction apparatus, the nurse thus being free to prepare herself to assist in holding the tongue depressor during operation. The only pre-operative preparation was an enema the night before the operation and nothing by mouth the morning of the operation. For the adults, a local anesthetic was used, which was prepared in the office by dissolving one Metz "B" tablet (novocaine 0.1 gm., suprarenin 0.00025 gm.) in seven cubic centimetres of double distilled Ringer's solution and this sterilized. This gives a 1.5 per cent novocaine solution and 0.002 minimum of 1:1000 adrenalin solution to each cubic centimetre. No preoperative preparation was necessary.

The anesthetic was infiltrated posterolateral to the tonsil, using a fine hypodermic needle on a 5 c. c. all glass syringe fitted with a three and a half inch extension to permit of deep infiltration. The infiltration was started at the superior pole of the tonsil well back from the margin of the anterior pillar in an effort to get behind the tonsil and place the anesthetic in the region of the tonsillar plexus of nerves, anesthetizing the superior pole of the tonsil, the soft palate and palatine arches. The needle was next introduced through the anterior pillar at its midpoint, and carried behind the tonsil infiltrating the capsule and lateral surface of the tonsil. The third point of infiltration is deep beneath the lower pole of the tonsil and on a line with the angle of the jaw. An effort is made to infiltrate behind the field of operation rather than in it. Postoperative pain is thus minimized.

26 gauge 3.5 cm. needle was used, which allowed of painless introduction, and deep infiltration. The injections were made very slowly, using little force. First the right and then the left tonsil was infiltrated, allowing ten to twenty minutes for its effect. Toxic symptoms were rarely noticed.

#### Technic

First the right then the left tonsil is enucleated. The patient is instructed to open the mouth and breathe in a panting manner. There is little trouble from gagging if the patient will continue breathe properly. The tongue is then gently depressed along its lateral margin and retracted medially and forward. This gives full exposure of the field of operation, and especially brings into view the lower pole of the tonsil which often lies far down along the base of the tongue, and which may otherwise be left. The right tonsil is seized with a Ballenger tenaculum along its long axis, pulled medially and rotated forward, thus placing the anterior pillar under some tension. The primary incision is then made along the margin of the anterior pillar at a point where the mucous membrane is reflected onto the surface of the tonsil. This incision is carried through to the glistening white tonsillar capsule. With a Hurd dissector the tonsil is gently shelled from its fossa. The dissection is first carried along the anterior pillar well down along the base of the tongue; then the superior pole is freed and the tonsil gently dissected free from the posterior pillar. This completed, the tonsil is entirely free from the pillars and hangs pendulous in its fossa. It is then snared with an Eve wire snare. A gauze plug is immediately inserted into the fossa and held temporarily. This procedure controls any bleeding which may occur. Care is taken not to leave the fossa until rendered clean and dry. An electric headlight furnishes the most satisfactory light.

The operation can be done quickly, causes little discomfort to the patient, and is entirely painless. The minimum amount of trauma and no resulting shock, combine to make a quick and comfortable convalescence.

#### AFTERCARE

In the ether cases the patients were allowed to react in the office and then returned to their home two or three hours after the operation. In the cases where local anesthesia was used, the patients returned home immediately, with instructions to remain quiet. All patients were permitted cold food on the day of operation, and a regular diet thereafter. A cleansing gargle was used every two or three hours consisting of salt and soda of each one-half teaspoonful to half a glass of warm water. Healing was complete in from one to two weeks. The throats remained sore for about one week, but there was little or no discomfort after the first twenty-four or thirty-six hours. Con-

valescence was more rapid in the children than in the adults. Difficulty in swallowing was relieved by allowing the following powder to dissolve on the tongue: Acetylsalicylic acid, two and a half grains, acetanilide, half a grain.

In only three of the cases in this series was there any degree of postoperative hemorrhage. All were of mild type, and in the cases where operation was performed under a local anesthetic, two were due to dislodgement of large clots by coughing; the other because of a mild inflammatory condition of the surrounding tissues. Both were arrested by direct pressure.

#### RESULTS

Forty-eight per cent of the patients have been cured of all symptoms complained of at the time of operation; forty-nine per cent were very much improved, and three per cent unimproved. The greatest percentage of cure was in the child groups; sixty per cent as compared with thirty-four per cent in the adult group. This is explained by bearing in mind the fact that the chief complaints among the children were the immediate result of their diseased tonsils and adenoids, while in the adult group the complaints were remote results or complicating conditions following long standing tonsillar infection, many of which were permanent or had become chronic. Ninety-five per cent of the children showed a remarkable gain in general health following the operation. A gain of ten to twenty pounds in weight was not uncommon, beginning a few weeks after operation, and steadily continuing. Along with this was a gradual increase in physical vigor and mental alertness. Children previously backward in school soon came up to the average for their age. The adults were slower in their general gain, yet progressive; associated conditions—neuritis, rheumatism and general malaise—were cured or much improved.

Considered surgically the majority of the cases were satisfactory, throats were uniform, pillars prominent, and fossa clean and smooth. A small percentage showed a less well defined posterior pillar and more or less contraction of the tonsillar fossa. This was noticed in those cases where there were large superficially situated tonsils. A few of the patients complained of some soreness and irritation following operation, especially the re-operative cases.

Since operation the incidence of most infectious diseases has been less during the two year period of observation. This holds especially for the child group, though an increased resistance is noted among the adults. This conclusion is based upon a comparison with similar children who have not been operated upon, as they present themselves at the office for treatment.

Tonsillitis and sore throat were decreased eighty per cent in the tonsillectomized children. The tendency to frequent winter colds was greatly reduced, especially in those having had enlarged adenoids. In this same group there was a decrease in ear infection. The occurrence of measles was not affected. The tendency to diphtheria infection was reduced.—(*N. Y. Med. Jour.*, Sept. 2, 1925.)

#### Food Allergy

The specific tests for the determination of food allergy are of two kinds, dietetic and dermal, says A. F. R. Andresen. The dietetic test, really the only absolute test for gastrointestinal allergy, has for its object the discovery of certain foods which when taken by the patient will invariably produce the symptoms complained of, and when withheld will result in more or less complete relief, depending on the amount of organic change caused by long continued allergic irritation.

There are two ways in which effects of diet may be studied. In well nourished patients, all food may be withheld for three days, the patient being given only water or a rice and water diet—the old Bulkeley diet. If due to food allergy (and not to rice), the symptoms should disappear or be markedly alleviated, and a careful written record of the results of adding one or more articles of food to the diet on successive days will disclose the food or foods to which the patient is sensitized. The other method consist in having the patient keep on a fairly full diet, but to vary the foods taken to as great a degree as possible, especially those taken just preceding an attack of the symptoms suspected of being of allergic origin. A detailed daily record of the diet and symptoms, showing the time and character of the food eaten and the time of onset and duration of symptoms, will in from two to four weeks almost invariably establish the identity of the offending foods. In the cases where the allergic reaction is continuous or occurs every day, the symptoms being due to some common daily article of diet like milk, egg, or wheat, dietetic study is more difficult and dermal tests are more helpful. The dermal tests also have the advantage of consuming less time.

#### DERMAL TESTS

The dermal tests depend upon observing the reaction of the skin to various purified proteins. While in very sensitive persons, the mere application of certain proteins to the skin surface may produce a reaction, it is necessary to get more definite

information, to introduce the protein through the outer layers of the skin. This has been accomplished in two ways: The first method consisted of scarifying the skin, rubbing an alkalinized solution of protein into the scarified area, and observing the reaction, the development of an urticarial wheal about the area indicating sensitization. The other method, which in recent years has entirely supplanted the first, consists of the endermic (intradermic) injection, by means of a hypodermic needle, of sterile solutions of purified proteins, a positive reaction consisting of the development of an urticarial wheal with pseudopod-like projections from its edges.

The purified proteins may be very simply prepared in any well equipped laboratory or may now be obtained from a number of reliable pharmaceutical houses. As many as two hundred proteins are used by some clinicians in testing for sensitization. In most of his cases the proteins were prepared and applied by Dr. R. H. Bennett, of Brooklyn. It must be remembered that not all persons with gastrointestinal sensitization will show an equal degree of skin sensitization, so that mild or even absent skin reactions do not necessarily indicate mild or absent gastrointestinal sensitiveness. The dietetic test is the final criterion of gastrointestinal sensitization.

The treatment of gastrointestinal allergy consists of treating the patient during an allergic reaction and of using measures to prevent future attacks. With the onset of the reaction, it is desirable to remove as much as possible of the offending protein from the gastrointestinal tract by lavage or induced vomiting and by catharsis. For the actual relief of symptoms, adrenalin chloride solution, 1 to 1,000, given intramuscularly or sublingually in ten to fifteen drop doses, will frequently act with great rapidity. Pituitrin is said to produce a later but more lasting effect. Calcium salts in large doses, such as a heaping teaspoonful (eight grams) of calcium lactate, will enhance and prolong the effect of the adrenalin. The calcium should, of course, be well diluted with water. Belladonna or atropin occasionally relieves the spasms, but these drugs are not to be compared with adrenalin in this respect. The reason for this effect of adrenalin is not known, but its efficacy in asthma, urticaria and other allergic manifestations has long been recognized.

To prevent allergic reactions, the only certain method of treatment is to remove the offending protein or proteins from the diet. This is easily accomplished in the case of foods which are only occasionally used in the patient's diet, such as berries, condiments, shellfish or even ordinary meats, fruits and vegetables or beverages. But where the patient is sensitized to such common articles of food as milk, egg or wheat, it is not only a great hardship, but practically an impossibility, to follow a diet with these proteins eliminated. In these cases desensitization must be attempted.

Desensitization may be accomplished in two ways. The specific method consists of either the oral or hypodermic administration of increasing doses of the offending proteins. In gastrointestinal allergy the oral method is to be preferred. In some cases hypodermic injections may be given at first and then followed up with increasing doses by mouth, but he has found the oral method entirely satisfactory. In the case of milk, the first dose by mouth should be one drop a day, which should be increased at first a drop at a time and then more rapidly as the daily dose becomes larger. Within a month a patient can thus be brought to a point where sufficient milk may be taken to make beverages and cereals palatable, or to permit of the taking of small quantities of desserts containing milk. Egg must be started in much smaller doses, many of the failures in oral desensitization being due to too large an initial dose. I have usually started with a teaspoonful of a solution of one drop of beaten egg in a glass of water, and have gradually reached a point where a whole egg a day could be tolerated. In the case of wheat, the flour may be made into a solution of boiling, and similarly administered. It is useless to desensitize a patient to occasional or seasonal foods, as it is a fact that unless the protein is taken daily thereafter, sensitization will rapidly recur. It is therefore only worth while to desensitize to milk, egg, wheat or potato, all of which may be taken each day without becoming distasteful.

Nonspecific, desensitization, much heralded, especially in France, while it would be an ideal method if successful, has not in my hands proved to be the panacea it was supposed to be. This method is based on the theory that by the intramuscular or intravenous injection of a foreign protein the resistance of the body to all proteins may be raised. It is essentially the same as nonspecific protein therapy of chronic infections, and consists in the injection of vaccines, peptone solution or other proteins into muscles or veins. The dose may be such as to cause a general reaction—chill and fever—or may be minute, and increased at three or four day intervals until large doses may be given intravenously without general reaction. A general reaction is probably desirable, cases having been reported where



complete desensitization to food proteins has been produced by one severe reaction after an intravenous dose of colon bacillus vaccine. His experience with the nonspecific method has been disappointing, the patients getting only temporary relief following the injections, even in cases where fifteen or twenty injections have been used, with the dose of peptone up to 2.5 c. c. of five per cent solution intravenously.

Endocrine therapy has been tried, and in some cases has been found to be successful. The continued administration of adrenal or pituitary extracts to prevent allergic attacks is not satisfactory nor advisable. Parathyroid therapy, using doses of one-tenth grain of the gland, has in some cases seemed of value, especially where combined with the administration of large doses of calcium. He has used as much as a heaping teaspoonful (8 grams) of calcium lactate, well diluted with water, three times daily.—(*N. Y. Med. Jour.*, Sept. 2, 1925.)

#### Reactivation of the Wassermann Reaction with Nonspecific Protein Injections

A. Mario uses nonspecific proteins for reactivation of the Wassermann reaction. He based on experiences of other writers. Uddgren and Guszmán had shown the possibility of obtaining serological reactivation by milk injections. They thought this a specific process. Scherber found reactivation occurring during lactotherapy. Ayres used radium bromid, Conradi and Sklarek used subcutaneous typhoid vaccine Radnai aolan, Schreiner pepton injections with Salvarsan in syphilitic treatment to better produce a negative Wassermann reaction. Nonspecific remedies have, as is well known, a rapid influence upon general paralysis. Neuda saw a child develop a positive Wassermann during pneumonia which again became negative after the inflammation subsided. Milk injections made the reaction positive in this child later. Similar cases were seen by others. Hutnel and Nadel saw the Wassermann reaction became positive under various febrile conditions in congenital syphilis.

The author considers autohemotherapy inadequate to produce reactivation. He uses milk albumin. In latent syphilis which had not been cured he had the following results: There were 8 cases all with symptoms of advanced syphilis. In 4 the Wassermann reaction was negative with slow hemolysis. In 3 reactivation was obtained. Four with completely negative Wassermann reaction were not reactivated excepting one who had a positive response after injection of mercury. The rest were negative in the attempt at reactivation. This group shows reactivation in 50 per cent.

Cured syphilis: There were 36 cases with established syphilis who had been observed for 6 months and, being "cured", had stopped treatment. In 10 of this group (28 per cent) reactivation was obtained while the others showed no serological changes. Recent syphilis: There were 11 cases of primary syphilis. Among them 6 showed reactivation (48 per cent). 2 had a Herxheimer reaction. In others it was difficult to decide whether reaction was specific. Congenital syphilis: Sixteen cases, 11 infants and 4 adults. In 6 (33 per cent) a positive reactivation was obtained. In a total of 71 patients reactivation was obtained. In a total of 71 patients reactivation was obtained in 26 (35 per cent).

Doses of 10 cc lactalbumin were used. If reactivation did not succeed it was tried again after 21 days. Of 26 patients, 24 showed reactivation after 1 injection. It was demonstrable in 5 on the third day, in 18 on the sixth and in 3 after 13 days. Some authors report much higher percentages.—(*Policlinico*, Rome, 1924, sez. prat. XXX, 1611.)

#### Fracture

It will be generally conceded the lessons of the war in so far as they relate to fracture have not received universal acceptance, or at least application. There are probably to-day hundreds, perhaps thousands of cases of fracture of the neck of the femur doomed to permanent crippling because the physician is ignorant of Whitman's method of reduction and retention. There are also probably hundreds or thousands of cases of fracture of the femoral shaft treated by Buck's extension and sand-bags; doomed to a degree of shortening which entails at least some crippling. It cannot be expected that the practitioner who sees, for instance, one fractured femur a year will take the time and go to the expense of learning how all fractures of the femur should be treated. If might be expected of him, with full knowledge of what results can be obtained and his inability to obtain them, that he would send such a case guarded by a Thomas splint to a hospital where it would be adequately and properly treated. In some hospitals, however, and even to-day, the treatment would be no better or even not as good as that he himself would give. As a means of remedying this condition, in so far as hospitals are concerned, Jones proposes the segregation of in-

patient fractures; the creation of special out-patient fracture clinics. There should be a fracture team which should include the orthopedist and each student of medicine should be required to attend both the in-patient and out-patient fracture clinics. These clinics should be in the form of demonstrations and discussions, and not in that of a series of lectures. It is further advised that every hospital should scrape its useless splints; that there should be a national committee organized to decide on those splints that should be retained and used.

At the present time in the best organized hospitals, particularly those of the teaching type, the fractures are in the main put in the charges of a man specially expert. They are regarded always as emergencies, as, much so as are acute abdominal crises, are diagnosed by the x-ray, and are set under the fluoroscope. There is an accepted treatment for each fracture based on alignment, on accurate apposition, on muscle balance and on traction where needful. There is a splintage securing rest. There is no meddlesome interference, there is an x-ray supervision. There is a guarded use with provision against angulation for weight-bearing bones. There is a follow-up, and the results are such as should make those to whom adequate facilities are not available hesitate to treat any fractures which in the past have been followed by crippling deformity.—(*Ther. Gaz.*, Sept., 1925.)

#### Analysis of One Hundred and Fifty-Two Cases of Ectopic Gestation

W. B. Hendry, of Toronto, Ontario, observes that during the period from July, 1912, to February, 1925, there were 10,002 cases of pregnancy admitted to the public wards of the Toronto General Hospital, and of these one hundred and fifty-two were extra-uterine, of which number one hundred and twenty-one were correctly diagnosed before operation, the remaining thirty-one going to operation for different pelvic conditions believed to require surgical interference.

In two cases the internal hemorrhage was from a ruptured blood cyst of the ovary, which in each instance was proved microscopically to be an endometrial implant. In three cases of suspected ectopic the correct diagnosis was an inflamed pelvic appendix with adhesions, and in five others salpingitis was mistaken for ectopic. The remaining twenty-one came to operation for the removal of pelvic masses, the nature of which was determined only after the opening of the abdomen. This made our percentage of error slightly over twenty-one per cent. A study of this series from the point of view of etiology leads one to the conclusion that while ectopic gestation may occur in any stage of sexual life it is more common at and before the age of thirty than after that age.

Relative sterility must also be considered as of some importance, although the passage of a considerable length of time between the last pregnancy and the present suspected condition is of itself of no particular significance, as 45 per cent of the present series occurred within two years of the last pregnancy. One of these cases, a woman of thirty-five, gave a history of fourteen full-term pregnancies, followed by twelve abortions in the three years following the birth of her last child.

Previous pelvic disease is of considerable importance as well and cannot be omitted as a possible causative factor, over thirty-five per cent of the present series having given such a history.

The period of gestation at which the onset of symptoms most commonly occurs is between the fourth and eighth week, although in 22.2 per cent of the present series unusual symptoms were noted before the fourth week and in 20 per cent after the eighth week.

Pain is a most important symptom and is almost always present, being absent in the present series in only 41.6 per cent of the cases. It may be of any degree or kind and may have almost any location in the pelvis or lower abdomen. The cramp-like pain in the pelvis is probably due to the attempt of the muscular fibers of the overdistended tube to get rid of the parasitic ovum, while the abdominal tenderness is due to peritoneal irritation as a result of the presence of foreign material in the peritoneal cavity following rupture of or leakage from the tube.

External hemorrhage is also an important sign and may be taken as an indication of a threatened interruption of the pregnancy. The amount of the hemorrhage, which is usually small in proportion to the pain, is significant when one wishes to differentiate between threatened intrauterine abortion and ectopic gestation. There was no bleeding in 20 per cent of the present series and profuse bleeding in 6.5 per cent, while in the remaining 73.5 per cent the bleeding was slight. It has been described as an effort of the uterus working in sympathy with the tube to expel a foreign body which in the case of the uterus is the decidua vera. However, the presence of blood in the proximal end of the tube, manifestly coming from the bed of a partially separated ovum situated in the isthmus or the interstitial portion, would lead one to the conclusion that some of this blood must



find its way out through the uterus, and that in case of a tubal abortion the external hemorrhage is a mixture of tubal and uterine blood.

The blood picture is not without significance. There was a leucocytosis in all the cases in which a count was made and it was found that a leucocytosis of above 15,000 signified intraperitoneal rupture of the tube, while a count below that figure signified either tubal abortion with slight hemorrhage or an unruptured tube.

With regard to treatment, the expectant method was only followed when there was an error in diagnosis. Once the diagnosis was made, however, the treatment was directed towards stopping the hemorrhage, removing the source of danger and restoring the disturbed balance of the vascular system.

In all emergency cases the operation should take as little time as is consistent with efficiency, and at the same time the deficiency in the blood stream should be made up by either blood transfusion or intravenous injection of gum acacia solution, glucose or normal saline.

In the present series the best results were obtained by blood transfusion, but a suitable donor was not always available and it was necessary then to resort to one of the other solutions. The result of autotransfusion in the two cases quoted above was so satisfactory, however, as to lead one to the conclusion that where fresh blood is present in quantity in the peritoneal cavity it may be restored to the circulation with safety and is of life-saving value to the patient.—(*Am. J. Obst. and Gyn.*, Sept., 1925.)

#### The Effects of the Modern Treatment of Syphilis

B. F. Byrd says that certain classes of syphilis are insurable. That class with a history of thorough treatment during the chancre stage with one of the accepted arsenic preparations and mercury over a period of two years, provided the blood and spinal fluid are negative one year after all treatment has been discontinued, may be considered cured and insurable at standard rates. Applicants with a history of thorough treatment after the appearance of secondary lesions and negative blood and spinal fluid one year after thorough treatment are certainly insurable at a moderately advanced rating. While there are some remarkable results reported from treatment with some of the new preparations, there is not yet presented sufficient evidence of a character to justify a rating in cases where there has been any nervous manifestations. The ability of the examiner, as well as the ability of the doctor treating the patient, should not be overlooked. There appears to be what we might characterize as a certain amount of syphilomania, and the syphilitic with a history of thorough treatment is not nearly so bad a risk as he has been considered.—(*Med. Insurance*, Vol. XLI, No. 5.)

#### Observations on the Treatment of Neurosyphilis with Tryparsamide

The use of tryparsamide at the Mayo Clinic extended over a period of three years, in 207 cases, says Paul A. O'Leary and S. William Becker. Although its use is still in the experimental phase, tryparsamide is of value in the treatment of the parietic type of parenchymatous neurosyphilis. It does not seem to offer as much encouragement as the treatment of general paresis with malaria, but it is available for those not suited to the risk of the latter treatment. Evidence, based on subjective and serological improvement, justifies the assertion that there is a certain small group of patients with early paresis who derive marked benefit. In seven cases in the whole series there was a complete reversal of the spinal fluid findings to normal but no associated clinical improvement.—(*N. Y. Med. Jour.*, March 3, 1926.)

#### Treatment of Neurosyphilis by Malaria

A report is made by Paul A. O'Leary, William H. Goeckerman and Stephen T. Parker of the preliminary observations after a ten months' trial of a series of thirty-five patients with neurosyphilis who were inoculated with malaria plasmodia. The method seems to offer more immediate effects than any form of treatment heretofore used for general paralysis. Many of the patients had been treated with tryparsamide, some with benefit and others without. The inoculation of patients with the *Plasmodium vivax*, who are already debilitated to some degree from their syphilis, is attended with some risk, so that it is a method for selected patients only who are under hospital care throughout the course. Of the twenty-four patients with frank paresis, 25 per cent showed a complete remission that allowed them to return to their former occupations within two months after the malaria was stopped, 37 per cent were definitely improved in one way or another, and two died, one as a result of the malaria and the other six months later in convulsions. All things considered, the results were very encouraging, so much so that the method warrants an exhaustive trial.—(*Arch. Derm. and Syph.*, March, 1926.)

#### Syphilis of Salivary Glands

Two cases of secondary syphilis with involvement of the salivary glands are reported. There was apparently no connection with lesions of the mouth, since in one instance the buccal mucosa seemed healthy. Trismus, enlargement of the parotid glands, with or without that of the submaxillary glands, and excessive discharge of saliva were the main symptoms. Under neoarsphenamine and mercury treatment the condition subsided in a few days.—(*Bull. Med.*, Paris, p. 72, 1926.)

#### Syphilitic Disease of the Spine

Four cases of spinal syphilis in patients 26 to 46 years of age, in which the lumbosacral region was affected in two, the lumbodorsal in one, and the dorsal in one. The cerebrospinal fluid in two cases was yellowish, while in the others there was an increase of albumin with lymphocytosis. Roentgenograms, under iodized oil control, revealed the presence of meningeal adhesions in the two with xanthochromia. Under specific treatment the adhesions disappeared. The pathologic signs in the cerebrospinal fluid subsided only very slowly under intensive specific treatment.—(*Bull. de la Soc. Med. des Hop.*, Paris, p. 33, 1926.)

#### Prevention of Congenital Syphilis

Arsphenamin treatment of the mother before and during the pregnancy gave the best results (six healthy children out of seven). Mercury administered during the pregnancy was much less efficient. Of the children from twenty-six mothers who had received arsphenamin before and mercury during the pregnancy, seven of the twenty-six were syphilitic. Only one healthy child was found among 158 born from untreated mothers.—(*Klin. Woch.*, Berlin, Jan. 8, 1926.)

#### Lumbar Anesthesia

The arguments advanced against lumbar anesthesia lack substantial evidence, says Koenig. For gynecological laparotomies spinal anesthesia is invariably given preference. A freshly prepared 5 per cent novocain solution in physiologic sodium chloride solution proved most effective in 500 cases of laparotomy. Forty-five per cent of the operations lasted over 60 minutes and in only 11.9 per cent did additional narcosis become necessary. Approximately one-third of the cases developed slight headache, which, however, readily yielded to medication. The real advantage of lumbar anesthesia consists in complete absence of danger to respiration and circulation. It also results in relaxation of abdominal walls.—(*Zent. f. Gyn.*, 1925, No. 13.)

#### Pertaining to Therapy of Shoulder Myalgia

Plato describes a new method for treatment of shoulder myalgia. Success with this method, however, is conditional upon the fact that the pains actually emanate from the muscles and are not due to an affection of the shoulder joint. Genuine myalgia is characterized by an absence of pain when the muscles are pressed, especially in the case of the muscle-insertion of the pectoralis-major. Pain only is experienced when the affected muscle is extended. Massage has not proved very efficacious. The chief treatment (provided there is no luetic affection of the cervical vertebra which requires specific treatment) consists of novocain injections. The tissues surrounding the painful muscle-insertion are infiltrated with 5 or 6 c.c. of a 2 per cent novocain solution, by inserting the needle 3 to 5 c.m. deep below the anterior border of the deltoid, along the bone between pectoralis-major and humerus, and injecting the solution when slowly withdrawing the needle. How long the anesthetic effect lasts, and how frequently a repetition of this procedure is necessary, unfortunately is not stated.—(*Med. Klin.*, No. 42, 1925.)

#### Sacral and Para-sacral Anesthesia

E. H. Galloway uses novocain. Excluding deformity of the sacrum failure to obtain proper anesthesia is attributed to faulty technic. In operations on the anus, the method is far preferable to local infiltration, because the latter requires deep injections into a field that is difficult to render sterile. This, likewise, applies to all rectal operations. In prostatic surgery, it is greatly to be preferred, because the patients are nearly always very old and weak, and it is not advisable to use a general anesthetic. Its field of usefulness extends the operations on the bladder and posterior urethra. Cystoscopic examinations can be made, irritable bladders can be distended, tumors and stones can be removed. Perineorrhaphies can be performed painlessly and even the uterine cervix can be dealt with surgically. Resection of the coccyx can be done painlessly. Fistula in ano is dealt with easily and with entire comfort to the patient. Sciatica can be quickly relieved, and frequently the relief is permanent.—(*N. O. Med. & Surg. Jour.*, March, 1926.)

## Correspondence

### Bills Before Congress

To the Editor of THE MEDICAL TIMES:

Two bills are now before the Senate, one by Senator Copeland of New York, regulating the sale of clinical thermometers. The purport of each bill is the requirement of a technical examination of them and a certificate of their accuracy. The two bills differ only in the manner of examination and certification. By the terms of one bill this work is placed under the direction of the Federal Bureau of Standards; by the other, the manufacturers themselves are to be licensed to perform the work under the direction of the Bureau of Standards. The material difference between the two bills is merely of a matter of expense and expediency.

The reason for one or the other measure is made apparent by Senator Copeland. The commerce of clinical thermometers is great; as a matter of fact more than one million are made yearly in the United States and many thousand are imported each year. The glass used in the manufacture of tubes and bulbs of the American product is made almost wholly in Corning, New York. The tubes and bulbs of the imported thermometers are made in Europe. In European countries the exactions concerning the commerce of clinical thermometers and the tests applied to them are severe. In the United States about any instrument graduated to tenths of a degree which can be placed in the mouth of a patient may be marketed as a clinical thermometer. Some dealers supply certificates showing the possible error for each tenth of a degree. These are above and beyond suspicion. Moreover, a clinical thermometer bearing the name of the trade mark of the manufacturer is pretty apt to be up to the required standard. At the same time a thermometer which does not bear the maker's sign manual may be regarded with suspicion. In the manufacture of clinical thermometers a considerable number fail to come up to the standard of accuracy required. These do not bear the maker's name. They are sold to jobbers who dispose of them as best they can. A very large proportion of the imported instruments are "rejects" and these may be very inaccurate. Some of them examined by the New York City Department of Health were inaccurate by more than one degree.

After the tube of a thermometer is drawn, molecular changes that alter its calibration are certain to take place. The tube must "season" or "ripen." From several months to a year or more must elapse before these changes cease and the calibration of the tube becomes constant. Three months may be regarded as the minimum time of seasoning; at least one manufacturing company continues the seasoning period for eighteen months to two years. The process, therefore, is expensive, for the reason that the capital invested in an expensive product must remain without earning power for one to two years.

Most physicians are familiar with the names of manufacturers that market thermometers of standard quality. The menace to safety lies in the cupidity of manufacturers who fill unseasoned tubes, and with the jobbers who import "rejects" or purchase them from unscrupulous makers. Most of these are purchased for family use. The purchaser who can buy a clinical thermometer for fifty cents does not see a reason for paying three times as much for one that apparently is "just as good." But a registration in the case of a patient's temperature that is inaccurate to the extent of several tenths of a degree is likely to be seriously misleading; indeed it may become a matter of life or death. Senator Copeland's contention for the exclusion of uncertified clinical thermometers is in the interest of public welfare. Whether or not it is a matter of State rather than Federal jurisdiction cuts no ice; safety demands that the accuracy of instruments of precision used in the practice of medicine should be beyond suspicion.

In addition I wish to point out a defect that occasionally but rarely occurs. Like any other maximum-registering thermometer, a clinical thermometer may become a "retreater."

The maximum-registering thermometer consists of two parts—the tube and the bulb. At the junction of the two parts a constriction is formed which does not permit the mercury to flow back freely; the mercury expands to its maximum and is—should be—held in place until shaken back into the bulb. Maximum thermometers differ as to the readiness with which the mercury is shaken back. Some require a sharp movement; in others the mercury flows back with a very gentle impulse. Reputable dealers reject the extremes; nevertheless the extremes are found in use. Those in which the back-flow occurs with a gentle movement require great care when used. The tube must be kept in a position nearly or quite horizontal until read. Now and then, even when held in a horizontal position the mercury begins to recede to the bulb as soon as it is removed from the mouth. Such a thermometer is a "retreater," and the ash receptacle is the best place for it.

A maximum thermometer in my possession after twenty-five years of use developed a retreating propensity. Why? I cannot

tell. It is in use, but it is mounted in a position with the bulb elevated in order to check the back-flow. Instances of the sort are very rare, but inasmuch as they have occurred in the past they may occur in the future. It is therefore advisable for the physician to test his thermometer in this respect now and then.

Years ago I provided the equipment for testing thermometers, intending to test clinical as well as commercial thermometers. After a second thought I concluded to omit the clinical instrument, and I have held to this resolution. Determining the accuracy or the error of a thermometer is not a difficult matter but there is no way by which one may tell whether or not the tube is seasoned. I am inclined to the opinion that the testing of clinical thermometers is too important a matter to be entrusted to any laboratory not designated by the Bureau of Standards as competent for the work. What is still more important is a system by which every clinical thermometer leaving the manufacturer shall bear upon its tube a sign mark that is a certificate of accuracy—one which designates also the name of the maker and the date of manufacturer. There is nothing difficult about the establishment of such a system. Thus, such a sign mark as 4265Z means that the thermometer was made and tested by the Smith Company August 1, 1919, and found to be without error. Any system which will put an end to the sale of unseasoned tubes and imported "rejects" will be an improvement over the condition obtaining at present—a condition which permits anything called a clinical thermometer to be sold.

J. W. REDWAY,  
Meteorological Laboratory,  
Mount Vernon, N. Y.

### From a Critic

To the Editor of THE MEDICAL TIMES:

Under the heading "Miscellany" appears, in the May MEDICAL TIMES, an article which I presume you wrote, paraphrasing Gulliver's travels. The article is not amusing, it is not logical, it is certainly not medical, and it is not literary.

It is, however, unfair; it is the meanest type of argument, for it cannot be met on a debatable ground. It is almost moronic in type.

Evidently you are a wet. Wets are constantly yelping about the fanatical dries. It is such silly twaddle as your effusion, and peculiar statistics which possibly make us fanatical.

I live in one of the wettest cities in the United States—Camden, N. J. Am connected with a very large hospital, and for several years before prohibition was a district (city physician). Conditions are immeasurably better now—and I don't mean maybe.

This is my first answer to a prohibition anti. But it is getting sickening to have to read and hear you chaps.

Yours,  
F. F. MOORE, M.D.

Woodlynne, N. J.

### Why Do Some Children Steal?

In some cases stealing is a child's way of "getting even." Mary was an apathetic but friendly little girl who vigorously denied, even before the subject was broached, the thefts of which she was accused. She did not have to be prompted to discuss her interest, her play life, and the movies which she occasionally attended. She said that she hated dolls, liked to play ball, and enjoyed the play life on the street. Mary volunteered no complaint of her home life, but it was not difficult to see that she was far from happy. Just before the interview was ended the child returned to the matter of stealing, stating quite openly and frankly that she had stolen. Without being questioned she confided, "Nobody likes me. I don't know why. The girls don't like me—they knock me down and tease me. I stole only from the people who teased me and from those I don't like."

Stealing was Mary's way of "getting even" with those who hurt her by their teasing and their ridicule.

Revenge and jealousy are not uncommon motives for stealing, especially with girls, even up to the college age. A girl of 16 years was brought to court on a charge of breaking and entering. Investigation showed that on three occasions she had gone to the house of her best friend and stolen wearing apparel, skates, and a ring, all of which she carefully hid away and made no attempt to use or sell. A rather long, detailed story of the case revealed the fact that, in spite of her extreme fondness for her girl friend, there were times when she became intensely jealous of her, especially when the other girl appeared in new clothes such as her parents could not afford to buy. It was after such periods of jealousy that she committed the thefts.

One must here assume that jealousy was a strong personality trait in the mental make-up of the girl, and it is extremely doubtful whether any treatment would completely eradicate it at her age. It is important, however, to give such an individual a better insight into her personality make-up so that she battle with her handicaps openly.—Publication No. 143, of the Children's Bureau of the U. S. Department of Labor.